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Date

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HEADQUARTERS AIR FORCE FLIGHT TEST CENTER EDWARDS AIR FORCE BASE CALIFORNIA

FTDTP

23 Aug 54

SUBJECT:

Ravision of Fig. 4 in AFTR No. AFFTC 54-16

By 1/Lt Donald H. Wooley

TO:

All Concerned

Investigation of additional data disclosed that the attached Maximum Level Flight Airspeed curve should replace the corresponding curve on page 6 in Appendix I of AF Technical Report No. AFFTC 54-16 to more accurately represent the capabilities of the F-86F aircraft with PTI modifications. The Maximum Calibrated Airspeed Chart on page three of the body of the above report should therefore be changed to read 258 knots with PTI and 252 knots without PTI at 45,000 feet due to this revision. The corresponding corrected test data sheet from page 12 in Appendix III is included.

FOR THE COMMANDER:

Incls

as shown

H. A. HANES

Colonel, USAF

Director, Flight Test and Development

54AA 58025

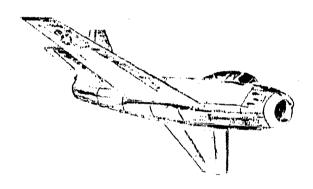
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# AIR FORCE FLIGHT TEST CENTER

TAIR RESEARCH & DEVELOPMENT COMMAND



AF TECHNICAL REPORT NO. AFFTC 54-16

PHASE II PERFORMANCE AND SERVICEABILITY TESTS
OF THE F-86F AIRPLANE USAF NO 51-13506 WITH
PRE-TURBINE MODIFICATIONS

DONALD H. WOOLEY, I/LT. USAF FLIGHT TEST ENGINEER STUART R. CHILDS, MAJOR, USAF TEST PILOT

**JUNE 1954** 

EDWINDS AIR FARCE BASE

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AF Technical Report Me. AFF 10. 54 16. June 1984

PHASE II PERFORMANCE AND SERVICEABILITY TESTS
OF THE
F-86F AIRPLANE USAF No. 51-13506 WITH PRETURBINE MODIFICATIONS

DONALD H. WOOLEY, 1/Lt, USAF Flight Test Engineer

STUART R. CHILDS, Major, USAF Test Pilot

UNITED STATES AIR FORCE
AIR RESEARCH AND DEVELOPMENT COMMAND
AIR FORCE FLIGHT TEST CENTER
EDWARDS, CALIFORNIA

CONFIDENTIAL 51376

# PUBLICATION REVIEW

This Report has been reviewed and is approved

H. A. HANES
Colonel, USAF
Director, Flight Test
and Development

J. S. HOLTONER
Brigadier General, USAF
Commander

# ABSTRACT

The increases in climb and level flight performance of the F-86F with Pre-Turbine injection modifications substantially improve the value of this aircraft as a fighter-interceptor; however, the problems of turbine blade failure and nozzle binding must be overcome before the unit can be used operationally.

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DISTRIBUTION

#### A. INTRODUCTION

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# 1. Project Objective

Flight tests were conducted on the F-86F airplane, USAF No.51-13506, with pre-turbine injection modifications to determine the state of development and serviceability of the installation and to obtain limited performance data.

# 2. Project Authority

The Phase II performance and serviceability tests were conducted under the authority of the Commander, AFFTC as requested by Air Research and Development Command TWX No. RDTOTP 4-22-E.

# 3. Project History

- a. Seventeen flights were made between 21 April and 5 May, 1954 totaling twelve hours of which two hours and twenty-eight minutes were flown with PTI in operation. Four additional flights were made between 6 May and 26 May, 1954 by other pilots of the Air Force Flight Test Center for additional qualitative evaluation of the airplane.
- b. The airplane was instrumented and maintained by the General Electric Company facility at the Air Force Flight Test Center and was returned to them under bailment agreement upon completion of the Air Force flight evaluation program. The flight test program was completed 26 May, 1954.
- c. Preliminary reports of these tests were submitted to the Commander, Wright Air Development Center on 3 May and 17 May, 1954. A detailed maintenance report was submitted to the same Hdq, 30 June 1954. These are included as Appendix IV.

# 4. Description of the Aircraft

- a. The airplane flown is a standard F-86F with  $6^{\circ}$  x  $3^{\circ}$  wing leading edges. The only modification to the exterior configuration is the addition of several air vents on the aft fuselage section to provide better cooling.
- b. The engine is a standard J47.GE-27 fitted with a Stellite tailpipe, variable nozzle and necessary controls and equipment to inject standard engine fuel through the turbine casing forward of the turbine wheel. The fuel is injected at four equally spaced points around the periphery of the turbine casing. The rate of flow of PTI fuel is controlled by compressor inlet pressure and a ground adjustment is provided to allow various PTI fuel schedules to be set up. The nozzle consists of four 90 degree flat plate segments which provide a near perfect circular opening throughout the nozzle area range. The nozzle is modulated by a Solar Microjet unit which senses the ratio between compressor discharge pressure and turbine discharge pressure. This unit operates by receiving an electrical signal of sufficient magnitude to send a pulse to the actuator motor to jog the nozzle to a slightly more open or more closed position until an electrical balance is obtained.

- c. PTI is placed in operation by moving the throttle outboard while in the full throttle position. This action closes a switch and PTI will remain in operation until the "cage" button on the throttle is depressed or until the throttle is retarded sufficiently to cause an unbalance between PTI and main engine fuel flows.
- d. The airplane was tested in the clean configuration only and all curves in Appendix I are of this configuration.
- e. The manufacturer limits PTI operation of this installation to an altitude range of 20,000 to 45,000 feet because of engine structural limitations.

#### B. TEST RESULTS

## 1. Climb

Check climbs were flown using two climb schedules. One schedule noted as schedule "B" in the climb curves in Appendix I was taken from Air Force Technical Report No. AFFTC 54-10 on Phase IV testing of the standard F-86F. This schedule is the recommended best climb schedule for the F-86F. From this schedule and estimated 40% thrust augmentation from PTI a theoretical best climb schedule was calculated and designated as schedule "A" in Appendix I. Since this PTI installation is limited to an altitude range of 20,000 to 43,000 feet, schedule "A" is an attempt to stay on the Phase IV schedule up to slightly below 20,000 feet; and then while lighting PTI, accelerating to the theoretical or proposed schedule for the remainder of the climb to 45,000 fect. The limited time available for tests and the somewhat arbitrary nature of the operating limits placed upon the unit at the present state of development precluded the developing of data reduction methods for reducing this data to standard day conditions. The data presented are, therefore, test data corrected for instrument error. Airspeed and altimeter position error corrections used are those established for the standard airspeed system of the F-86F airplane during Phase IV testing. The applicability of these curves was established by checks against an F-86A pacer aircraft. A summary of climb performance is presented below:

	TIME TO CLIM		
Altitude	Without PTI	Wi	th PTI
ft.	Sched. B - Min.	Sched. A - Min.	Sched. B - Min.
20,000 to 45,000	12.1	4.4	4.6

### RATE OF CLIMB

Altitude	Without PTI	With	PTI
ft	Sched. B - ft/min	Sched. A - it/min	Sched, B-ft/min
30,000	3,000	7,400	7,000
45,000	1,000	3,300	4,200

b. PTI operation during all climbs was satisfactory with slight combustion instability for a short period on a few of the climbs. This condition was detected by the pilot but apparently did not affect climb performance. Although the manufacturer limits the present PTI configuration to 45,000 feet a maximum altitude attempt was made to explore and substantiate this Fmit. A maximum altitude

of 53,760 feet was established but loss of a turbine blade terminated the flight. At this altitude the aircraft is capable of a 600 ft/min rate of clamb.

# 2. Level Flight

- a. Level fight speed versus power data were obtained at 20,000, 30,000 and 45,000 feet. Considerable difficulty was encountered in obtaining this data due to nozzle binding. A nozzle with surface hardened segments was installed which alleviated this condition considerably but nozzle sticking was still present to a limited degree on subsequent flights. This nozzle sticking was apparent only in level flight at altitude and was not apparent during any of the climbs.
- b. Level flight data are presented only as time histories of level flight accelerations and maximum level flight airspeed. RPM is not directly representative of engine performance with this installation. PTI fuel is injected upstream of the turbine wheel and burns aft of the turbine wheel. The burning of this additional fuel increases the pressure on the back side of the turbine blades and tends to decrease engine RPM. Additional fuel is scheduled to the main engine to prevent this decrease in RPM while on PTI operation. RPM is therefore dependent upon this balance of fue, scheduled between the main engine and PTI. Nozzle position also affects engine RPM and since it cannot readily be established that the nozzle was completely free from stacking during apparently satisfactory operation, nozzle binding may have adverse affects on the data. Since RPM is affected by the two conditions stated it is not a reliable criteria of engine thrust. Maximum level feight airspeed data were obtained with and without PTI within the 20,000 to 45,000 feet range to which PTI operation is limited. These instrument corrected data are presented in Figure 4, Appendix 1 and are listed in the summary below:

#### MAXIMUM CALIBRATED AIRSPEED

Altitude ft.	Without PT's knots	With PTI knots
20,000	423	439
30,000	353	363
45,000	254	255

A comparison of acceleration runs at 20,000, 30,000 and 45,000 feet were made with and without PTI in operation. At 20,000 feet the time to accelerate from a CAS of 166 knots to 420 knots was reduced from 3,47 minutes without PTI to 1,5 minutes with PTI, at 30,000 feet an increase in CAS from 156 knots to 350 knots required 3,5 minutes dry and 1,72 minutes wet and at 45,000 feet from 210 knots to 254 knots the time required was 3,16 minutes compared to 1,0 minute. Time histories of these accelerations are presented as instrument corrected data in Figure 3 in Appendix I. The two accelerations made at each of the three altitudes were made as consecutive runs of the same flight.

#### 3. Static Thrust Calibration

A ground static thrust calibration of the test engine was made on the Universal Thrust Stand of the Air Force Flight Test Center. Results of the test are presented in Figure 5, Appendix 1. AF Technical Report No. AFFIC 51-16

# C. CONCLUSIONS

1. It is concluded that the increase in performance of the F-86F due to the PTI installation is of such magnitude as to warrant further exploration of the system. The installation has sufficient merit to make it advisable for the Air Force to secure development test history on the system in order that definite operating limits and maintenance requirements may be established.

# D. RECOMMENDATIONS

1. The AFFTC recommends that further developmental testing on the PTI installation be accomplished both by the contractor and by the Air Force. To insure representative operation more than one aircraft should be used for this testing.

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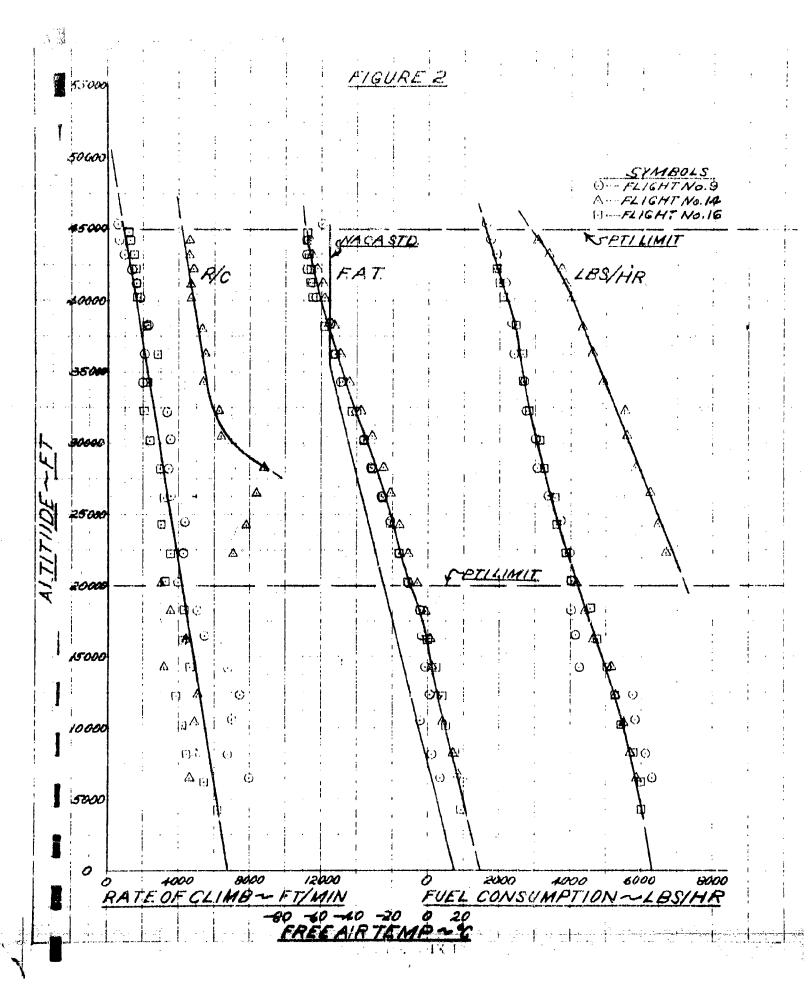
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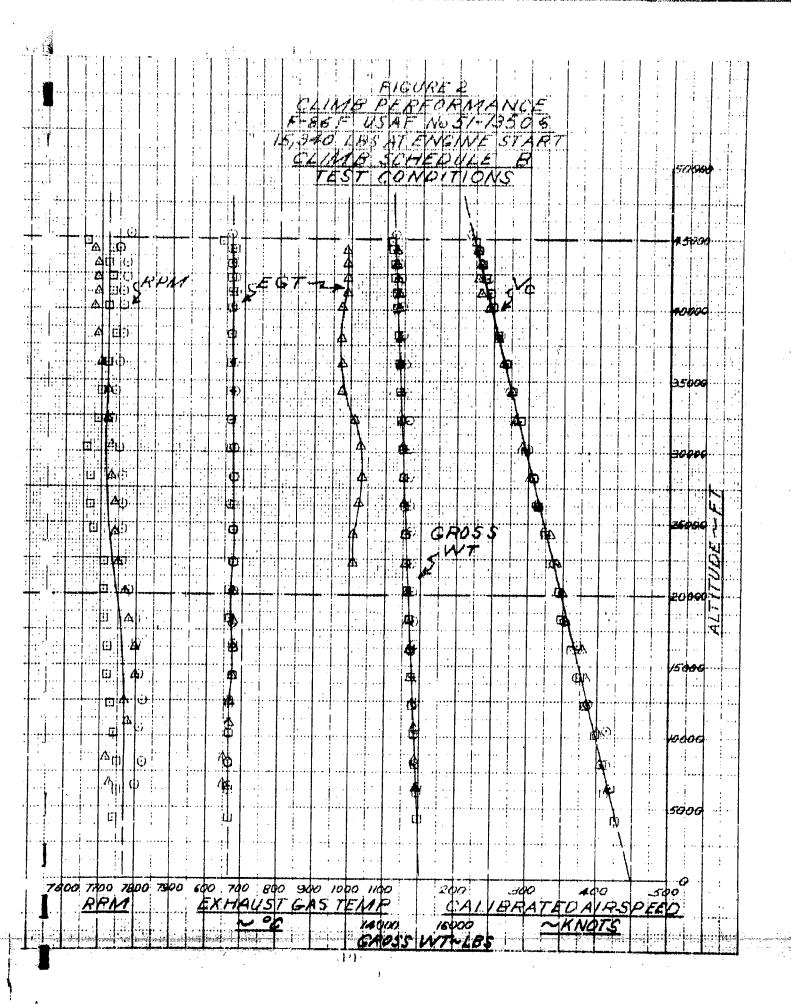
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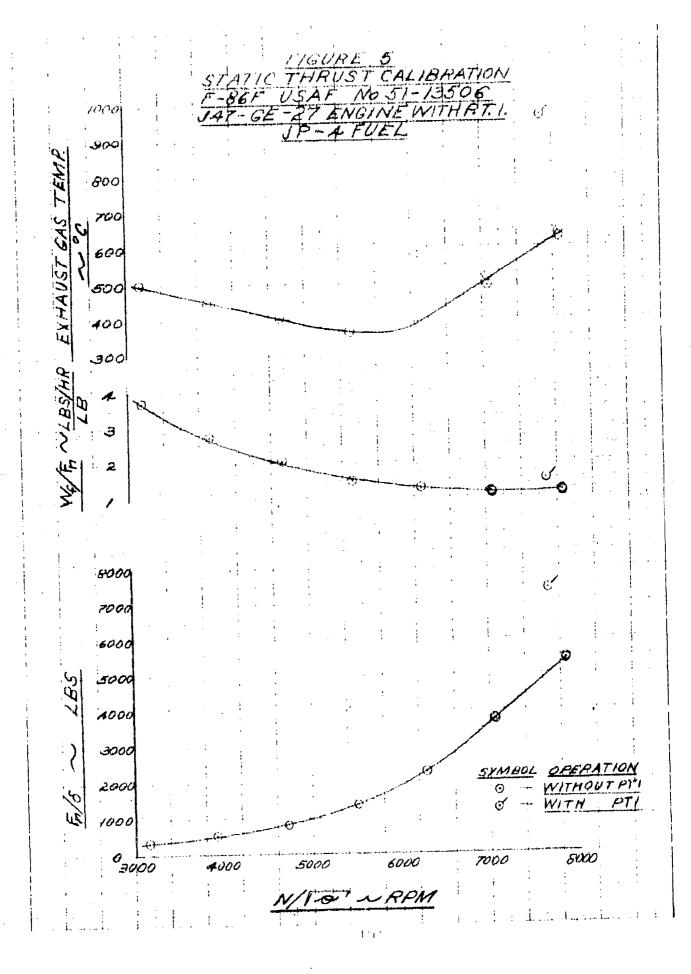


FIGURE NO 6

AIRSPEED POSITION ERROR CORRECTION
CHECK AGAINST PHASE IL CALIBRATIOI
WITH F-86A USAF NO 52-4349
STANDARD SYSTEM
F-86F USAF NO 51-13506

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INSTRUMENTATION	3
PHOTOGRAPHS	
<ol> <li>Front View</li> <li>Three-Quarter Left Front View</li> <li>Left Side View</li> <li>Three-Quarter Left Rear View</li> <li>Rear View</li> </ol>	5 6 7 8 9
	OPERATIONAL LIMITATIONS  POWER PLANT  WEIGHT AND BALANCE  INSTRUMENTATION  PHOTOGRAPHS  1. Front View 2. Three-Quarter Left Front View 3. Left Side View

#### A. DIMENSIONS

The following design data and general dimensions, except those affected by PTI modifications, were taken from the airplane model specification, North American Report No. NA-51-1091, dated 13 Feb 52;

### 1. General Dimensions:

Span	37,12 ft
Length (overall)	37.54 ft
Height (overall)	14.74 ft

# 2. Wings

Area (including ailerons) Span Aspect Ratio	302,26 sq ft 37,12 ft 4,56				
Taper Ratio Dihedral	.510 3°				
Sweepback (25 percent line of the b	,0				
airfoil)	35° 41"				
Mean Aerodynamic Chord(length)	102.0 in				
Root Chord (in the streamline)	130,16 in				
Tip Chord (in the streamline)	66.34 in				
Airfoil section designation root - NACA  0012-64(modified) tip - NACA-0011-64(modified) ("eading edge is symmetrically extended 6 inches at the root and 3 inches at the tip)					

(a.)	Flaps	
	Area (total.)	32.51 sq ft
	Chord (mean - in the stream-	
	line)	29.62 in

Deflection 38°

(b) Ailerons

Area (each alleron) 16,36 sq ft
Defsection up 15°
dn 15°

3. Fuselage:

Width (maximum)	60,0 m
Height (to top of canopy)	78,25 in

4. Speed Brakes:

Area (total surface :	arca)	10.98 sq ft	
Deflection	•	50°	

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# 5. Vertical Tail:

(a)	Fin.		
	Area(including balance area	forward of	
	the hinge line)		25.32 sq ft
	Normal setting		0°
	Deflection	right	0°
		left	0°

# (b) Rudder: Area(including tab and excluding rudder balance forward of the hinge line) Deflection right 27.5° left 27.5°

(c)	Tabs	•	
•	Arca		.87 sq ft
	Deflection	right	15° -
		left.	15°

# 6. Horizontal Tails

(a)	Stabilizers		
` ,	Area(movable portion only)		19,10 sq ft
	Span		12.75 ft
	Root Chord		<b>45.50</b> in
	Deflection	up	6°
		$\overline{\operatorname{down}}$	10°
	Dihedral		10°

(b)	Elevator;		
` ,	Area (aft of hinge line)		8,62 sq ft
	Deflection (about the hinge line and		
	directly related to the horizontal	up	20.9°
	stabilizer angle)	dn	3.3°

# B. OPERATIONAL LIMITATIONS

# 1. Limit Speeds

Divr (at 12,000 feet)	556 knots
Dive (at 12,000 feet) Dive (at 29,000 feet)	421 knots
Flaps down	185 knots
Gear extended	185 knots

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2. Limit Maneyver Load Factors

Cican configuration 15 (due to PTI ballast) to -3.

3. Power Lamit tions

T. P. T.

M. Without PTI Wit

	RPM	Without PTI	With PTI
Malatary (30 mm _o )	7950	690°C	1100°C
Normal rated (continuous	7630	635°C	<b>=-</b> ==

4. Recommended Wing Fiap Setting

Take-Off (full extens	ion) 38°	
Landing (full extension	on) 38°	

5. Maximum in Flight Co Positions

Forwa.rd	20.4% MAC 25.3% MAC
Aft	25,3% MAC

# C. POWER PLANT

1. Engine

Model General Electric, Mfg. J-47-GE-27 with PTI modification
Engine number 085674

#### D. WEIGHT AND BALANCE

Configuration	Clean
Basic Weight with PTI modifications	12,288 lbs
PTI kit	197 lbs
Ballast (required with the PTI installation)	140 lbs
Pilot	200 lbs
Oil	23 lbs
Fuel (gal)	435 gals
Fuel at 6.5 lb/gal	2,828 lbs
Gross weight at engine start	15,339 lbs
Gross weight at engine start CG - % MAC	25.0

# E. INSTRUMENTATION

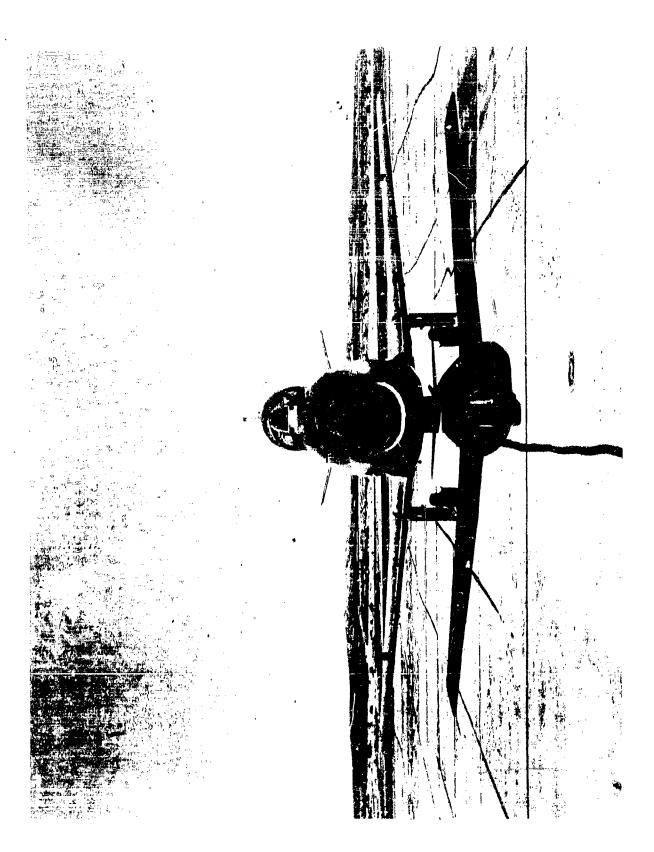
a. The instrumentation was installed and maintained by the General Electric Company at the company's facility at Edwards Air Force Base, Calif. The following instruments were installed in the airplane prior to the Air Force evaluation flights:

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- 1. Coordination counter
- 2 Clock
- 3. Airpired indicator
- 4. Altimeter
- 5. Exhaust gas temperature
- 6. Tactometer
- 7. Outside Air temperature
- 8. Main fue, flow
- 9. PTI fuel flow

All the above listed instruments which were installed in the Photo Recorder Compartment were duplicated in the cockpit with the exception of the Outside Air Temperature Indicator. For the Air Force evaluation flights the two standard altimeters were replaced by two C-19 altimeters and two Fuel Flow Totalizers were added to the instrumentation. All instruments were calibrated by General Electric except those installed for the Air Force tests which were calibrated by the Instrumentation Branch, Flight Test Engineering Laboratory, Edwards Air Force Base, California.

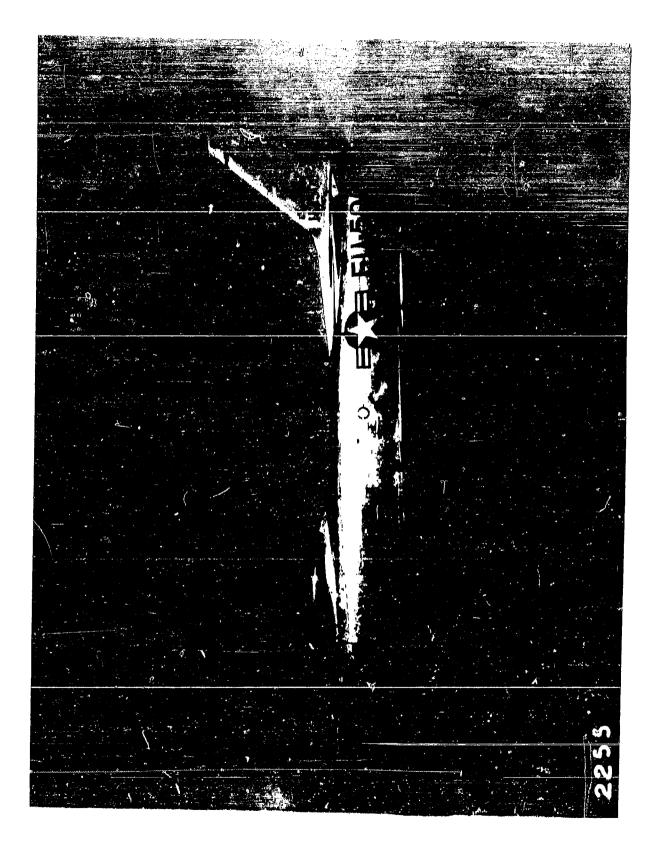
- b. Thrust Stand fuel flows were measured by manually timing an increment on the fuel totalizer. Timing was started as the one gallon counter moved to the next number and timing was stopped approximately one minute later as the counter moved again.
- c. The standard ship's airspeed system was used for all tests and was connected to indicators in the pilot's panel and photo panel. The location and dimensions of the wing boom are the same as on a standard F-86F.
- d. The free air temperature was obtained from a shielded temperature bulb mounted beneath the fuselage to the right side of the centerline just aft of the nose gear. This bulb was connected to a photo-panel indicator only. The temperature recovery factor used was 1,00.



APPENDIX II

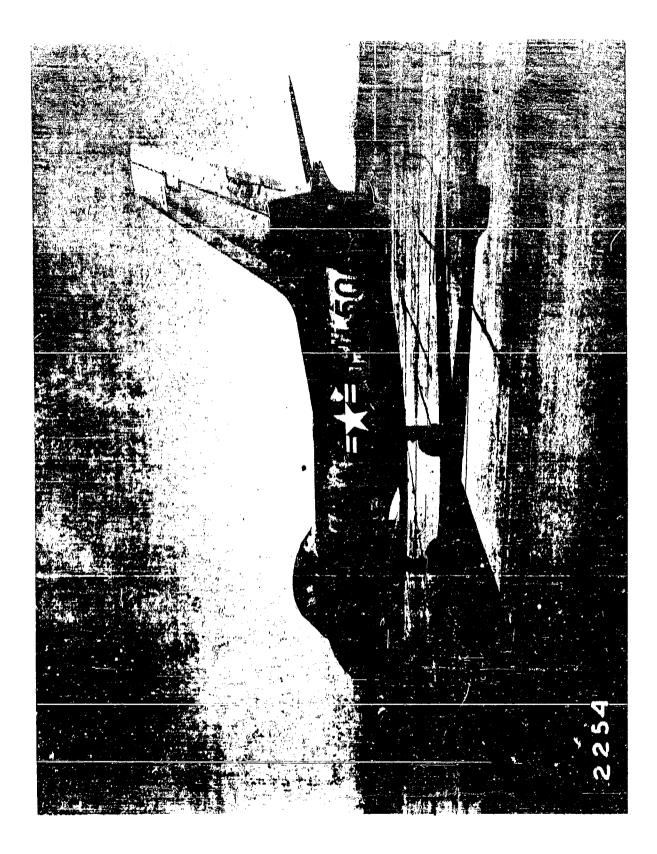


APPENDIX II

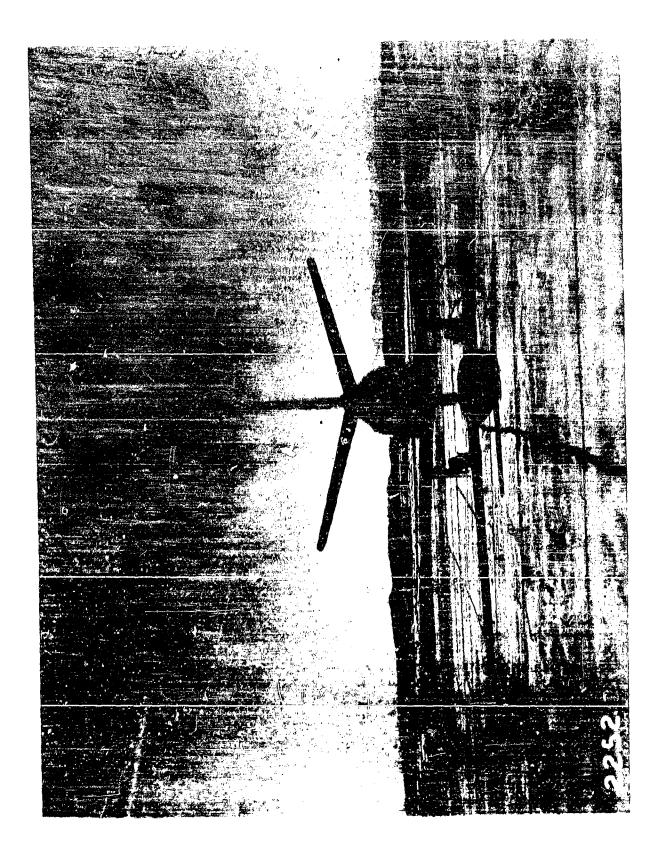


APPENDIX II





8 VEDENDIX II



APPENDIX II

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# APPENDIX III

		Page Number
A,	FLIGHT LOG	1
B.	ORIGINAL DATA	3

A. FLIGHT LOG

The following listing reflects a brief history of the flight tests:

Flight No.	Date	Flight Time hours - min. PTI Total	TESTS
1	21 Apr 54	0::06 0::31	Pilot familiarization, PTI climb 20,000 to 45,000 feet. Attempted PTI lights at 35,000 and 45,000 feet.
2	22 Apr 54	0::04 0::28	PT1 climb 20,000 to 45,000 feet, at- tempted PTI lights at 35,000 and 45,000 feet.
3	23 Apr 54	0:45 0:48	PTI climb 20,000 to 45,000 feet, attempted PTI lights at 45,000 feet.
4	24 Apr 54	0:06.3 0:35	PTI climb 20,000 to 45,000 feet, at- tempted dry speed power at 35,000 feet.
5	29 Apr 54	0:03.5 0:40	Dry climb to 45,000 feet, attempted PTI lights at 20,000, 30,000, 35,000 and 45,000 feet.
6	30 Apr 54	0:05 0:50	Dry climb to 45,000 feet. Successful PTI lights at 20,000 and 35,000 feet.
7	30 Apr 54	0:07.3 0:55	Dry climb to 20,000 feet, airspeed calibration with pacer airplane at 20,000 feet.
8	30 Apr 54	0:12:1 0:55	PTI climb 20,000 to 45,000 feet, turns and dive with PTI
9	30 Apr 54	0;08 0;50	Dry climb to 45,000 feet. Successful PTI lights at 40,000 feet.
10	1 May 54	0:09 0:40	Dry climb to 45,000 ft, PTI climb 45,000 to 53,420 ft. Turbine bucket failed at 53,420 ft, Max. alt. reached was 53,760 feet.
11	4 May 54	0206.7 1205	PTi climb 20,000 to 45,000 feet, at- tempted PTI lights at 40,000 feet.
12	4 May 54	0:15.5 0:40	PTV climb 20,000 to 45,000 feet. Suc- cessful PTF lights at 40,000 and 45,000 feet.

Flight No.	Date	Flight hours -		теятя	i t
13	4 May 54	0	0:50	Dry climb to 45,000 feet. Turns at 40,000 feet.	
14	4 May 54	0:12.5	0855	PTI climb 20,000 to 45,000 feet. Turns at 45,000 feet with and without PTI. Accelerations with and without PTI at 45,000 feet.	
15	5 May 54	0	0: <b>4</b> 5	Tower fly-bys. Instrumentation malfunction, no photo-recorder data.	
16	5 May 54	0:01.8	0:45	Dry climb to 40,000 feet, airspeed calibration with Pacer aircraft at 20,000 and 40,000 feet.	,
17	5 May 54	0::05	0850	Dry climb to 30,000 feet. Accelerations with and without PTI at 20,000 and 30,000 feet.	
18	6 May 54	0;13	0;33	Familiarization and quantative evaluation flight. Lost turbine bucket at altitude. Dead stick landings on lake bed.	
19	21 May 54	0:05	1:00	Familiarization and qualitative evaluation flight.	
20	25 May 54	0::17	0:40	Familiarization and qualitative evaluation flight.	
21	26 May 54	0:07	0:25	Familiarization and qualitative evaluation flight. Lost turbine bucket at altitude.	
	TOTALS:	3:10,2	14:340		

TEST I	ATA (	CORRE	CTED	FOR II	NSTR UI	MENT	ERROR	•	
				No. 51				-	
B - A	1 - LIF	CHIC	1100	-	SCHA	DULE	Δ		
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C. Lias Temp - C.		660	- 50	960	600	460	920	630	<i>U3</i> (
E. Cas Press - THE	115	119	129	129	1.35	145	152	157	125
nal Card - gal			127	122	7.35		134	707	760
nel Flow - gal/h-		<del> </del>		<b></b>			<del></del>		
nel Press - PSI		L		<u></u>		L	L		
ω									
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'est		مسوے ہے	-6/1/	10	- 267	APV			
ionfiguration		LBAN	5	5	5		3		
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ime - Min	13.32	15.58			18.26		17.08	17.34	11.6
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PM	77/0			7710	77/0		7700		769
Ges Temp - C	950	960	970	960	950	930	925	9,50	22
	1		<u> </u>						
M. Gas Press - Tie									
	169	173	176	179	183	1/88	192	196	~0
nol Head - eni	169	173	176	179	183	788	132	196	200
mel Used - gal	169	173	176	179	183	788	132	196	200
nol Head - eni	169	173	176	179	183	/88	132	196	201
mel Used - gal	169						1	796	201
mel Used - gal	169 CHE	CB C	21M				1	796	201
nel Blad - gal /hr nel Flew - gal /hr nel Press - Bill	169 CHE		21M	B ~			1	796	201
rel Used - gal/hr rel Flew - gal/hr rel Press - Bill resignation	169 CHE	CB C	,21M	B ~	SGN	TOUL!	A 8	8	8
rel Used - gal/hr rel Flew - gal/hr rel Press - Bill estimates light No.	069 CHE 6	CR C	,21M	B ~	SGN	TOUL!	A 8		8
rel Used - gal/hr rel Flew - gal/hr rel Press - Bill ast configuration light No.	169 CHE 3 17.93	CH ( LEAN 3 18.17	3 /8.4 231	B 13.69 12.19	SCN	5 2,27 4,0	8 2.42 399.5	8 2.72 3 <b>48</b>	8 3.01 3.81
rel Used - gal/hr rel Flew - gal/hr rel Press - Bill resignation	169 CHE 3 17.93	CH ( LEAN 3	3 /8.4 231	B 13.69 12.19	SCN	5 2,27 4,0	8 2.42 399.5	8 2.72 3 <b>48</b>	8 3.00
rel Used - gal/ar rel Flew - gal/ar rel Press - Bil rel Press	169 CHE 3 17.93 299	CH ( LEAN 3 18.17 231 42320	3 8.4 231	B ~ 18.69 219	SCN	5 2,27 4,0	8 2.42 399.5 754.0	8 2.72	3.01 3.81 1178
rel Used = gsl rel Flow = gsl/hr rel Flow = gsl/hr rel Flow = gsl/hr rel Flow = Rill last Me light Me	169 CHE 6 3 17.93 299 4/340 - 34	CB ( LEAN 3 18.17 231 41320 -34	3 8.4 231 43200	B 18.69 219 94260 -32	SCN	3 2,27 410 4150 35	8 2.42 399.5 754.0 32	8 2.72 368 9700 26	8 3.01 3.81 1178
rel Hed - gal/hr rel Flew - gal/hr rel Flew - gal/hr rel Fress - Edi anti- configuration light Mo ligh	169 CHE 6 3 17.93 299 4/340 - 39 7690	CB ( LEAN 3 18.17 231 41320 -34 7690	3 /8.4 23   432/0 -34	B 3 18.69 219 94260 -32	SCN	5001 3 2,27 4/0 6/50 36 7190	8 2.42 399.5 759.0 32 7100	8 2.72 368 9700 26	8 3.01 3.81 1178 2:
Tel Hard - gal/hr Tel Flew - gal/hr Tel Flew - gal/hr Tel Fress - Bill  Tel Fress - Bill  Tel Fress - C	169 6 3 17.93 299 41340 - 39 7690 970	CB ( LEAN 3 18.17 231 41320 -34 7690	3 /8.4 23   432/0 -34	B 18.69 219 94260 -32	SCN	3 2,27 410 4150 35	8 2.42 399.5 759.0 32 7100	8 2.72 368 9700 26	8 3.01 3.81 1178 2:
Tel Hand - gal/hr Tel Flew - gal/hr Tel Flew - gal/hr Tel Fress - Bill  Tel Fress - Bill  Tel Fress - C  Tel Fr	169 6 3 17.93 299 41390 - 39 7690 970	CH C LEAN 3 18.17 231 41320 -34 7690 975	3 /8,4 231 432(0 -34 7690	3 13.69 219 14260 -32 7700 770	SCN	5004 2 27 410 4/50 35 7190 475	8 2.42 399.5 154.0 32 7 8 0 0	8 2.72 388 9700 26 7 840 475	8 3.01 3.81 1178 1178 2.13 6.2
Tell Hand - gal/hr  Tell Flow - gal/hr  Tell Frees - Bill  Tell Hand  Tight Ma  Tight	169 6 3 17.93 299 41340 - 39 7690 970	CH C LEAN 3 18.17 231 41320 -34 7690 975	3 /8.4 23   432/0 -34	3 13.69 219 14260 -32 7700 770	SCN	5001 3 2,27 4/0 6/50 36 7190	8 2.42 399.5 154.0 32 7 8 0 0	8 2.72 368 9700 26	8 3.01 3.81 1178 1178 2.13 6.2
Hel Hand - gal/hr Hel Flew - gal/hr Hel Flew - gal/hr Hel Fress - Bill Hel Flew - His Hight Me High Me Hight Me High Me Hight Me	169 6 3 17.93 299 41390 - 39 7690 970	CH C LEAN 3 18.17 231 41320 -34 7690 975	3 /8,4 231 432(0 -34 7690	3 13.69 219 14260 -32 7700 770	SCN	5004 2 27 410 4/50 35 7190 475	8 2.42 399.5 154.0 32 7 8 0 0	8 2.72 388 9700 26 7 840 475	8 3.01 3.81 1178 1178 2.13 6.2
Tell Hand - gal/hr  Tell Flow - gal/hr  Tell Frees - Bill  Tell Hand  Tight Ma  Tight	169 6 3 17.93 299 41390 - 39 7690 970	CH C LEAN 3 18.17 231 41320 -34 7690 975	3 /8,4 231 432(0 -34 7690	3 13.69 219 14260 -32 7700 770	SCN	5004 2 27 410 4/50 35 7190 475	8 2.42 399.5 154.0 32 7 8 0 0	8 2.72 388 9700 26 7 840 475	8 3.01 3.81 1178 1178 2.13 6.2
Hel Hand - gal/hr Hel Flew - gal/hr Hel Flew - gal/hr Hel Fress - Bill Hel Flew - His Hight Me High Me Hight Me High Me Hight Me	169 6 3 17.93 299 41390 - 39 7690 970	CH C LEAN 3 18.17 231 41320 -34 7690 975	3 /8,4 231 432(0 -34 7690	3 13.69 219 14260 -32 7700 770	SCN	5004 2 27 410 4/50 35 7190 475	8 2.42 399.5 154.0 32 7 8 0 0	8 2.72 388 9700 26 7 840 475	8 3.01 3.81 1178 2.13 6.2
Tell Hand - gal/hr  Tell Flow - gal/hr  Tell France Bill  Tell Manual State  Tell Manual State  Tell France Bill  Tell France Bill  Tell France Bill  Tell Flow - gal/hr  Tell France Bill  Tell France Bill  Tell Flow - gal/hr  Tell France Bill  Tell Flow - gal/hr  Tell France Bill	169 6 3 17.93 294 41340 -34 7690 202	CH ( LEAN 3 18.17 231 41320 -34 7690 975	3 8.4 231 4320 -34 7690 7000	B 3,18,69 2,19 14,260 -3,2 7,700 2,70	SCN	8 2, 27 4,0 4,50 35 7,190 1,75	8 2.42 399.5 7540 32 7800 665	8 2.72 388 9700 26 7 840 475	8 3.01 3.81 1178 2.13 6.2
rel Hard - gal/hr rel Flew - gal/hr rel Flew - gal/hr rel Fress - Bill  ast configuration light Mo lime - Mix All knots lititude - ft ir Ferry - C Dis c. Gas Temp - C c. Gas	169 CHE 3 17,93 299 7490 202	CB C	3 8.4 231 432(0 -34 7690 7000	B 3,18,69 2,19 14,260 -3,2 7,700 2,70	SCN	8 2, 27 4,0 4,50 35 7,190 1,75	8 2.42 399.5 7540 32 7800 665	8 2.72 388 9700 26 7 840 475	8 3.01 3.81 1178 1178 2.13 6.2
rel Hard - gal/hr rel Flow - gal/hr rel Flow - gal/hr rel Fress - Bill  ast configuration  light Mo. lime - Mix  All knots lithtide - ft ir Famp - C  Did  a. Gas Tamp - C  pid Flow - gal/hr rel Flow - gal/hr rel Flow - gal/hr rel Fress - Bill  ast configuration	169 CHE 3 17,93 299 7490 202	CB C CB C CB C	3 /8.4 231 432/0 -34 7690 /000	B 3,18,69 2,19 14,260 -3,2 7,700 2,70	SCHE	3 2,27 4/0 6/50 35 7790 175 054	8 2.42 399.5 7540 32 7800 665	8 2.72 368 9700 26 7.840 675	8 3.00 3.80 1175 7 14 6.20
rel Hard - gal/hr rel Flew - gal/hr rel Flew - gal/hr rel Fress - Bill lent Me light	CHE 3 17.93 299 41390 - 39 7690 202	CB C - BAN - 31 - 34 - 34 - 7690 975 - 209 - CB C - BAN	3 8.4 231 432(0 -34 7690 7000	B ~ 3 18.69 219 14260 -32 7700 209	SCHE	8 2,27 4/0 4/50 35 7790 175 054	8 2.42 399.5 7540 32 7100 665 957	8 2.72 368 9700 26 7 840 675	8 3.00 3.81 1178 2.13 0.6 0.6
Hel Flew - gal/hr Hel Flew - gal/hr Hel Flew - gal/hr Hel Flew - gal/hr Hel Me Hend - Mir Hittide - ft He Temp - C  Did He Gas Temp - C  Hel Flew - gal/hr	CHE 3 17.93 299 41.340 - 39 7690 202	CB C 18.17 231 42320 -34 7690 975 209 CB C 84N 8	231 43200 -34 7690 206	B ~ 3 18.69 219 14260 -32 7700 209 209 4.42	SCHE	2, 27 4,0 4,50 35 7,790 175 054	8 2.42 399.5 759.0 32 7800 665 057	8 2.72 368 9700 24 7.840 4.75 06/	8 3.01 3.81 1171 2: 7 14 6.2 0 6
Hel Flew - gal/hr Hel Flew - gal/hr Hel Flew - gal/hr Hel Fress - Bill Hell Ma Hight	CHE 3 17.93 299 4/390 - 39 769 202  CHE 6 8 3.38 376.5	CB C 231 42320 -34 7690 975 209 CB C 54N 6 3575	2.1M 3.8.4 2.3.1 4.3.2.0 7.6.90 7.6.90 2.06 2.06 4.07 3.5.3	B 3 18.69 219 14260 -32 7700 209 209	SCH 8 9,93 358,5	2,27 410 4150 35 7190 175 054	8 2.42 399.3 759.0 32 7800 665 057	8 2.72 368 9700 24 7.40 4.75 06/	8 3.01 3.81 1178 2: 7 14 0 6
Hel Flow - gal/hr Hel Flow - gal/hr Hel Flow - gal/hr Hel Fress - Bill Hight Ma High	CHE 3 17.93 294 41340 -34 7690 202  CHE 8 3.38 376.5 13900	CB C 28.17 23.1 42320 -34 7690 975 209 CB C 84N 8 3.68 3.7.5 16000	2.1M 3.8.4 2.3.1 4.3.2.0 7.6.90 7.6.90 2.06 2.06 4.07 3.5.3	B 3 18.69 219 14260 -32 7700 209 209	SCHE 8 4,93 358,5 22040	2004 2, 27 410 6150 35 7790 175 054	8 2.42 399.5 7840 32 7800 665 057	8 2.72 388 9700 26 7 140 475 067 5,59 329 27460	8 3.00 3.81 1173 7 14 6.2 0 6 5.9 3,3,296
Tell Hand - gal /hr  Tell Flow - ft  Tell Flow - ft  Tell Flow - gal /hr  Tell Flow - gal /hr	CHE 3 17.93 299 4/340 - 34 7690 202  CHE 8 3.38 376.5 13900	CB C 18.17 231 42320 -34 7690 975 209 CB C 8 3.68 3.75 16000 22	21M 3 8.4 231 4320 -34 7690 206 21ME	B  3 18.69 219 94240 -32 7700 270 209 4.42 339.5 17080	SCHE 8 4,93 358,5 22040	2004 2, 27 410 6150 35 7790 175 054	8 2.42 399.5 759.0 32 7800 665 057	8 2.72 368 9700 26 7.40 4.75 0.67 5.59 329 2740	8 3.01 3.31 1773 0.6 0.6 5.9 3/3, 2966
Tell Hand - gal/hr  Tell Flow - gal/hr  Tell Flow - gal/hr  Tell Flow - gal/hr  Tell Ma  Tell	CHE 3 17.93 294 41340 -34 7490 202 202 203 376.5 13900 22 7120	CB C 18.17 231 42320 -34 7690 975 209 CB C EAN 8 3.68 3.75 16000 22 7810	21M 3 8.4 231 4320 1320 1000 206 216 21730	B  3 /8.67 2/9 4-260 -32 7700 270 2-09 4.42 3.39.5 /7080 /7	SCHE 3595 22090 75	8 2, 27 4,0 4,50 35 7,190 175 0,54 0,54 2,55 24,500 7,760	8 2.42 399.5 7890 32 7800 665 057	8 2.72 388 9700 26 7 840 475 061 5.59 324 2740 7	8 3.01 1173 7 17 6.2 0 6 3.9 3.3 2960 773
The Proper Bill  The Pr	CHE 3 17.93 299 41340 - 39 7490 202 202 202 203 200 200 200 200 200 20	CB C 18.17 231 42320 -34 7690 975 209 CB C 8 3.68 3.75 16000 22	21M 3 8.4 231 4320 -34 7690 206 21ME	B  3 18.69 219 94240 -32 7700 270 209 4.42 339.5 17080	SCHE 8 4,93 358,5 22040	2004 2, 27 410 6150 35 7790 175 054	8 2.42 399.5 7540 32 7800 665 057 057 348 25480 11 7760	8 2.72 388 9700 26 7 840 475 061 5.59 324 2740 7	8 3.01 1173 7 17 6.2 0 6 3.9 3.3 2960 773
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TEST	DATA	CORRE	CTED -	FOR T	NSTRII	MENT	EBRO	R	
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ltitude - ft	32000		126/40	738096	70/2/		91900	72900	17.23
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			USAL				William Minn St. of	**	
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	and the second of the second	د در آزاد که نا <b>ستان</b> و ۳۳ از بازی د <del>ست</del> و از می شمیر	istoria. Esta de la Est Esta de la Esta de la E	1.4 days . T	San mark best Co	A. K. K.K.	Car		* in
Configuration		GAEGI	1.5		·		9	9	
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AS - K-GAR	والمراج المراجع والمستسلس	300	1711	1 3 4	1 2 20		125/	119/12	1220
Altitude - ft	16,00	12120	122.80	14140	119020	16220	177770	20000	1220
Air Temp C	125	130	126	1820	78/0	120	7800	1-4-	4
RPM		2820				12800			776
Cx. Cas Temp - C	66"	665	665	665	6.25	625	675	625	675
CK. (iss Pross - SH	<u> </u>								
Fual and - cal	57		66	70	17/	75	79	84	8
Fuel Flow - gel/hr		1						1	<u> </u>
Fue. Press - PSI		<u> </u>							
rest	CHE	CAC	21M	13 -	- SCA	ISDUL	B B		
Configuration		LEA	V						
Hight No.	9	1 9	9	9	9	9	7	7	7
l'ime - Min	9.67	5.14	5.70	6.21	6.67	7.63	8.42	9,73	105
AS - KROLS	132/	309.5	3045	2965	276	1277	1525	256	52
Altitude - ft	24/80	309,5	28000	29980	1 -1000	34140	36020		2000
Air Temp-°C	1-4	/	-4	7	1-73	1 - 57	-23	-26	3
PM	7760	122/0	7760	<u> </u>	7730	7776/1		7760	22
	675	165	1295	675	665	1750	67.5	465	67
Cx. Oss Temp-°C		1663	1-2-	623	1-62	6/2	1673	1 6 6 J	162
br. Gra Press - "Hg	94	99	103	107	<del>                                     </del>		1 7 7	7-3-3	135
	74	LZZ_	1200	1	110	117	125	130	1/20
CHAL MEGG - GET	<del></del>	1							
red Flow - gal/hr					6-1/	- 6/11	<b>.</b> .		
nel Flow - gal/hr rel Press - PSI	CHE	CAC	ZIM	18-2	SGH	5DVL	5 B		
real Flow — gal/hr real Press — PSI rest configuration	C 4 E	CH C		9	9		13	14	19
real Flow — gal/hr real Press — PSI  Cast Cast Castignization Flight No.	9	CH ( LEAN)	9	9	9		13	).4 3.34	19
real Flow — gal/hr real Press — PSI  Cast Cast Castiguration Flight No.  Sinc — Min.	9	LEAN 9	9	9 15.05	9		/4 3.03	14 3.34 402.5	
real Flow — gal/hr real Press — PSI  Cast Cast Casfiguration Flight Mo.  Nuc. — Min.  All = knote	9 // 22 2 4	11.98 240	9 12,91 2.29	9 15.05 226	9 /4.98 217.5		14 3.03 414	74 3.34 402.5 7980	347.
real Flow — gal/hr real Press — PSI  Cast Cast Cast Cast Cast Cast Cast Cas	9 //.22 294 40980	LEAN 9 11.98 240 92000	9 12,9/ 229 43000	9 15.05 226 44000	9 14.98 217.5 75/00		14 3.03 414 6200	7980	398. 1016
real Flow—gal/hr real Press—PSI  Cast Cast Cast Cast Cast Cast Cast Cas	9 11,22 24 40980 -35	11.98 240 92.000 -38	9 12.91 2.29 43.000 -39	9 15.05 226 44000 -37	9 /4.9 8 2.17.5 75/00 -31		19 3.03 919 6200	7980	397. 1016 36
real Flow — sai/hr real Press — PSI  cest cestignization light Mo.	9 11.22 244 40980 -35 2760	11.98 240 92000 -38	9 12.91 229 43000 -39 7770	9 15.05 226 44000 -37 7750	9 /4,98 2,/7,5 45/00 -3/ 7780		/4 3 03 9/1 6200 14 7750	7980 41 7720	397. 1016 36 778
Twel Used — gal Prel Flow — gal/hr Trei Press — PST Cast Cast Cast Cast Cast Cast Cast Cast	9 11.22 244 40980 -35 2760	11.98 240 92.000 -38	9 12.91 229 43000 -39 7770	9 15.05 226 44000 -37	9 /4,98 2,/7,5 45/00 -3/ 7780		19 3.03 919 6200	7980 41 7720	397. 1016 36 778
real Flow — gai/hr real Press — PST  Test	9 11.22 294 40980 -35 2760 675	11.98 11.98 240 92.000 -38 7770 673	9 12.91 2.29 43.000 -39 777.0	9 15.05 226 44000 -37 7750	9 /4,98 2/7,5 45/00 -3/ 7780 665		19 3 03 9/4 6200 94 7750	7980 41 7720 650	397. 10/6 36 178
real Flow — gal/hr real Press — PSI  Cast Cantiguration Flight Mo.  The Mo.	9 11.22 294 40980 -35 2760 675	11.98 240 92000 -38	9 12.91 229 43000 -39 7770	9 15.05 226 44000 -37 7750	9 /4,98 2,/7,5 45/00 -3/ 7780		/4 3 03 9/1 6200 14 7750	7980 41 7720	397. 1016 36 178
Trai Flow - gai/hr  Trai Prass - PST  Trai Prass - PST  Trai Prass - PST  Trai Prass - Train - C  Train -	9 11.22 294 40980 -35 2760 675	11.98 11.98 240 92.000 -38 7770 673	9 12.91 2.29 43.000 -39 777.0	9 15.05 226 44000 -37 7750	9 /4,98 2/7,5 45/00 -3/ 7780 665		19 3 03 9/4 6200 94 7750	7980 41 7720 650	397. 1016 36 178
real Flow — sai/hr real Press — PSI  Cast Cast Castignvation Flight Mo.  Vine — Min.  All — knote Vintuda — ft ir Tamp — G  Dir  Cast — San — San  San Tamp — G  San Tamp	9 11.22 294 40980 -35 2760 675	11.98 11.98 240 92.000 -38 7770 673	9 12.91 2.29 43.000 -39 777.0	9 15.05 226 44000 -37 7750	9 /4,98 2/7,5 45/00 -3/ 7780 665		19 3 03 9/4 6200 94 7750	7980 41 7720 650	397. 1016 36 178
real Flow — sai/hr real Press — PSI  Cast Cast Castignvation Flight Mo.  Vine — Min.  All — knote Vintuda — ft ir Tamp — G  Dir  Cast — San — San  San Tamp — G  San Tamp	9 11.22 294 40980 -35 2760 675	11.98 11.98 240 92.000 -38 7770 673	9 12.91 2.29 43.000 -39 777.0	9 15.05 226 44000 -37 7750	9 /4,98 2/7,5 45/00 -3/ 7780 665		19 3 03 9/4 6200 94 7750	7980 41 7720 650	397. 1016 36 178
real Flow — gai/hr real Press — PST  Cast	9 //.22 244 40980 -35 7760 675	11.98 11.98 240 92000 -38 7770 675	9 12.91 229 43000 -39 7770 (73	9 15.05 226 44000 -37 7750 665	9 /4.98 2/7.5 75/00 -3/ 7780 665		77 3.03 9/19 6200 94 7730 650	7980 41 7720 650	10/6
Trai Flow - gai/hr  Trai Prass - PST  Cast  Cast	9 11.22 244 40980 -35 7760 675 139	11.98 240 92000 -38 7770 675 143	9 12.91 229 43000 -39 7770 (73	9 15.05 226 44000 -37 7750 665	9 /4.98 2/7.5 75/00 -3/ 7780 665		77 3.03 9/19 6200 94 7730 650	7980 41 7720 650	397. 1016 36 178
real Flow — sai/hr real Press — PSI  Cast Cast Cast Cast Cast Cast Cast Cas	9 11.22 244 40980 -35 2760 675 139	11.98 11.98 240 92000 -38 7770 675	/ 9 12.9/ 229 43000 -39 7770 (73 197	9 15.05 226 44000 -37 7750 665	9 /4.98 2/7.5 75/00 -3/ 7780 665		77 3.03 9/19 6200 94 7730 650	7980 41 7720 650	397. 10/6 36 178 66'
Tasi Flow — gai/hr  Tasi Press — PST  Cast  Cast	9 11.22 244 40980 -35 2760 675 139	11.98 240 92000 92000 -38 7770 675 143	9 12.91 2.29 43.000 -37 7770 (75 197	9 15.05 126 44000 -37 7750 665 158	9 74.98 2.77.5 45.700 7.780 665 166	EDUL.	77 3.03 9/19 6200 94 7730 650	7980 41 7720 650	397. 10/6 36 178
real Flow — sai/hr real Press — PSI  Cast Cast Cast Cast Cast Cast Cast Cas	9 11.22 244 40980 -35 2760 675 139	11.98 240 92000 -38 7770 675 143	9 12.91 2.29 43.000 -39 -39 (75 (75 197	9 15.05 126 44000 -37 7750 665 15.8	9 /4.98 2.17.5 45/00 -31 7780 665 /665	EDUL-19 6.86	14 3.03 9/4 6200 1750 650 66	7980 41 7720 650 71	397. 10/6 36 178 66 
real Flow — sai/hr real Press — PSI  Cast Cast Cast Cast Cast Cast Cast Cas	9 11.22 244 40980 -35 2760 675 139	11.98 240 92000 92000 -38 7770 675 143	9 12.9/ 229 43000 -39 -7770 (75 147 5.44 377.5	9 15.05 226 44000 -37 7750 665 15.8 15.8	9 /4.98 2.17.5 75.00 -31 7780 665 /665 /665 /665	EDUL 19 6. 84 341	74 3.03 9/4 6200 7750 650 66	7980 41 7720 650 71 738 319	79 79 79 79 75 75
Tasi Flow — gai/hr  Tasi Press — PST  Cast  Cast	9 11.22 244 40980 -35 2760 675 139	11.98 240 92000 92000 -38 7770 675 143	9 12.91 2.29 43.000 -39 -39 (75 (75 197	9 15.05 226 44000 -37 7750 665 /58 /58	9 /4.98 2/7.5 75/00 -37 7780 665 /665 /665 /665 /7900	EDUL 19 6.84 341 22000	14 3.03 9/1 6200 1750 650 66	7980 41 7720 650 71 738 319	79 79 79 79 75 75
Tasi Flow — gai/hr  Tasi Press — PST  Cast  Cast	9 11.22 244 40980 2760 675 139	11.98 240 92000 -38 7770 673 /43 289 4.87 389 /4040	9 12.9/ 229 43.000 -39 7770 (75 /77 /77 /77 /77 /77 /77 /77 /77 /77 /	9 15.05 226 44000 -37 7750 665 15.8 15.8	9 /4.98 2.17.5 75.00 -31 7780 665 /665 /665 /665	EDUL 19 6.84 341 22000	74 3.03 9/4 6200 7750 650 66	7980 41 7720 650 71 738 319 21260	391. 10/6 36 178 66 28 280 280
Trail Flow - gai/hr  Trail Prass - PST  Cast Cast Cast Cast Cast Cast Cast Cas	79 11.72 794 70980 673 139 139 4,20 3815 12160	11.98 240 92000 92000 -38 7770 675 143	9 12.9/ 229 43.000 -39 -7770 675 147 	9 15.05 226 44000 -37 7750 665 /58 /58 /190 359 /1960 26 /780	9 /4.98 2/7.5 75/00 -37 7780 665 /665 /665 /665 /7900	FDV1-1 19 6. 91 391 22000	74 3.03 9/4 6200 7750 650 66	7980 41 7720 650 71 738 319 21260 7790	79 778 778 664 75 75 75 75 773
Trail Proce - pai/hr  Trail Proce - PST  Trail Proce - PST  Trail Proce - PST  Trail Proce - Ft  Trail Proce - Ft  Trail Proce - PST  Trail Proce	79 11.72 794 70980 673 139 4,20 381,5 12160 32 7770	11.98 240 92000 92000 92000 92000 673 (43 (43 143 148 1400 1400 1800	9 12.9/ 229 43.000 -39 -7770 675 197 -5.49 377.5 15780 30 7800	9 15.05 226 44000 -37 7/50 665 /58 /58 /9 5:40 3:59 /7960 26	9 /4.98 2/7.5 75/00 77/80 665 //6 //6 //9 350 //9/00 22 7/70	EDUL- 19 6.81 391 22000 18 7750	14 3 03 9/4 6200 44 7730 650 66 	7980 41 7720 650 71 738 319 21260 7790	79 778 66 778 778 778 775 757 757 757 773
Trail Flow — gai/hr  Trail Pross — PST  Cast  Ca	79 11,72 79 70,980 6,75 139 6,20 381,5 12,160 32 7770 1,65	11.98 240 92000 -38 7770 673 /43 289 4.87 389 /4040	9 12.9/ 229 43.000 -39 -7770 675 /47 5.44 377.5 /5780 30 7800 675	9 15.05 226 44000 -37 7750 665 /58 /58 /190 359 /1960 26 /780	9 /4.98 2.17.5 75.00 -31 7780 665 166 166 5CH 4.31 350 79900 22	FDV1-1 19 6. 91 391 22000	14 3 03 9/1 6200 7730 650 66 66 19 2,/2 33/ 24020 13	7980 41 7720 650 71 738 319 21260	79 778 778 664 736 736 7280 7280 773 7035
Trail Flow - gai/hr  Trail Pross - PST  Cast Cast Cast Cast Cast Cast Cast Cas	79 11,72 79 70,980 6,75 139 6,20 381,5 12,160 32 7770 1,65	11.98 240 92000 -38 7770 673 143 143 144 149 14040 31 7800 625	9 12.9/ 229 43.000 -39 -7770 675 197 -5.49 377.5 15780 30 7800	9 15.05 226 44000 -37 7750 665 /58 /58 /190 359 /1960 26 /780	9 /4.98 2/7.5 75/00 77/80 665 //6 //6 //9 350 //9/00 22 7/70	FDV1-1 19 6. 86 391 22000 12 7250 1010	14 3 03 9/4 6200 44 7730 650 66 	7980 41 7720 650 71 238 319 21260 7710 1025	79 778 778 664 736 736 7280 7280 773 7035
Test Press - PSI  Test Press - PSI  Test Press - PSI  Tight Ma  Time - Min  AS - knots  Title Press - The  Test Press - The  Test Press - The  Test Press - PSI  Test Press - The  Test Press -	79 11.72 794 70980 673 139 4,20 3815 12160 32 7770 165	11.98 240 92000 92000 92000 92000 673 (43 (43 143 148 1400 1400 1800	9 12.9/ 229 43.000 -39 -7770 675 /47 5.44 377.5 /5780 30 7800 675	9 15.05 226 44000 -37 7750 (65 15.8 15.8 15.9 5.90 35.9 17960 26 7780 475	9 /4.98 2.17.5 75.00 6.31 7.780 6.65 1.66 1.66 1.66 1.66 1.99 6.31 33.0 1.9900 22 1.770 6.75	EDUL- 19 6.81 391 22000 18 7750	/4 3 03 9/4 6200 44 7730 650 66 	7980 41 7720 650 71 738 319 21260 7790	79 778 66 778 778 778 775 757 757 757 773
real Flow—gal/hr real Press—PSI  real Press—PSI  real Press—PSI  real Man  As — knote  littude—ft  real Press—The  real Press—The  real Press—PSI  real Psi  real	79 11,72 79 70,980 6,75 139 6,20 381,5 12,160 32 7770 1,65	11.98 240 92000 -38 7770 673 143 143 144 149 14040 31 7800 625	9 12.9/ 229 43.000 -39 -7770 675 /47 5.44 377.5 /5780 30 7800 675	9 15.05 226 44000 -37 7750 (65 15.8 15.8 15.9 5.90 35.9 17960 26 7780 475	9 /4.98 2.17.5 75.00 6.31 7.780 6.65 1.66 1.66 1.66 1.66 1.99 6.31 33.0 1.9900 22 1.770 6.75	FDV1-1 19 6. 86 391 22000 12 7250 1010	/4 3 03 9/4 6200 44 7730 650 66 	7980 41 7720 650 71 238 319 21260 7710 1025	79 778 778 664 736 736 7280 7280 773 7035

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Test 1	DATA (						EKKO	ĬŠ	
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l'est	JUHE	CAS	-6/11	133	2 CHE	DULE	<u>H</u>		
Configuration		CLE	+ N'				<u>.                                </u>		
Flight No.	19	12	·	12	17		19		
Time - Min	1 88	818	8.60	12.75	17,27	9.62	9.82		
IAS -kugus	29/	80.5	272	269	257.5		2.31	227	231
Altitude – ft	30/80	32010	37466		37820			42020	430
Air Tamp - °C	19	-11	-/6	-2/	- 2.4	-29	-3/	-34	-35
RPM	2730	7720	7720	7700	7690		7690	7690	769
Ex. Gas Temp - °C.	1030	1010	772	975	975	975	990	990	290
Ex. Gas Pross - "H	8	<del> </del>	<del> </del>	7 77	<del> </del>		<del>                                     </del>	<del> </del>	1
Fuel Haed - gal	137	138	144	148	151	155	157	160	169
Fuel Flow - gal/hr			ļ <u>.</u>	ļ	<u> </u>	ļ	ļ	<b></b>	ļ
Fuel Press - PSI	<u> </u>	ļ	<u> </u>	<u> </u>	<u> </u>				<u> </u>
	12772	777	, , , , ,						
Test		CH !		10 -	-36H	E DV LE			
Configuration	1/4	et CA		1 7 7	7 - 77		<del></del>	1 10	יכבי ז
Flight No.		<del> </del>	126	1 3/6	76	13/6	1 2 2 -	16	1
Cime - Min	10.90	<b></b>	2,28	2,63	3,04	3,50	4.02	12.52	4.93
AS - Lugte	226	<u> </u>	423	708	404	399	378.5	37/5	359
Altitude – ft	43980	<del> </del>	9000	5980	7960	9900	12020	19060	1598
Air Temp -°C	-36		46	75	72	3 8	<u> </u>	122	12/
RPM	7680		7740	7750	7750	7740	77.30	7720	772
Ex. Gas Temp-°C	990		665	665	665	665	665	6 75	67
m	I								
Ex. Gas Press - "Hg					1 / . 4	سيم رسيد ا	82	189	94
Tuel Used - gal	167		57	62	69	75	0 /	$Q_{ij}$	<u></u>
Tuel Used - gal/hr	167		57	62	97	75	02	6./	
Tuel Used - gal	167		57	62	97	/5	0.2		
Fuel Used - gal Fuel Flow - gal/hr	167		57	62	67	75	6.2		
Fuel Hand — gal/hr Fuel Flow — gal/hr Fuel Press — PSI	167								
Fuel Used - cal Tuel Flow - gal/hr Fuel Press - PSI	167 CHE	CKC	21M						
Fuel Used - cal Fuel Flow - gal/hr Fuel Press - PSI Cest Configuration	167 CHE	CRC	21M						
Fuel Used - cal Fuel Flow - gal/hr Fuel Press - PSI Cest Configuration	167 CHE	LEAN	2111	B ~	SCH1	70VL)	FB (6		76
Fuel Used — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Fest Lonfiguration Flight No. Firme — Min	167 CHE 16 5.45	6.03	2/M // 6,53	B ~	56H2	8,55	9.27	16	72
Fuel Used — cal Fuel Flow — gal/hr Fuel Press — PSI Cest Configuration Flight No.	167 CHE 545	6.03 341.5	2/M // 4:53 328	B ~	5CH1 7.88 3.11.5	70VV 8.55 3.23.5	9.27 2.93.3	/6 /0.29 286.5	11.11 22-
Fuel Used - cal Fuel Flow - gal/hr Fuel Press - PSI Test Lonfiguration Flight No. Fime - Min	167 CHE 545	6.03 341.5	// // 6.53 328 22060	B ~ /6 721 321 34060	SGH1 7, 8 8 3,1,5 25960	70VL 9,55 303,5 18000	8 9.27 293.3 29440	16	11.11 22-
Fuel Used - cal Fuel Flow - gal/hr Fuel Press - PSI  Test Lonfiguration Flight No. Time - Min AS - kn   q	167 CHE 545	6.03 341.5	// // 6.53 328 22060	B ~ /6 721 321 34060	SGH1 7, 8 8 3,1,5 25960	70VL 9,55 303,5 18000	9.27 2.93.3	/6 /0.29 286.5	11.11 22-
Fuel Used - cal Fuel Flow - gal/hr Fuel Press - PSI Test Lonfiguration Flight No. Fime - Min	167 CHE 16 545 344.5 18120 22	2.6.03 341.5 20080 17	2/M 6,53 328 22060 11	8 76 721 321 34060 7680	56H2 7,88 3,1,5 25960 3	\$ 55 3 0 3 5 2800 0 -3 7670	9,27 293.3 2994.0 - 8	76,29 281,5 32020 -15	76 71.77 22: 37:06 -26 77:0
Fuel Used - gal/hr Fuel Flow - gal/hr Fuel Press - PSI  Test Configuration Flight No. Time - Min AS - kn 's Altitude - t. Alt Temp - C.	167 CHE 16 5,45 344,5 18120 22	2.6.03 341.5 20080 17	// // 6.53 328 22060	8 76 721 321 34060 7680	5CH1 7.88 3.11.5	70VL 9,55 303,5 18000	9,27 293.3 2994.0 - 8	76 70:19 281.5 32020 -13	76 71.77 22: 37:06 -26 77:0
Fuel Used - gal/hr Fuel Flow - gal/hr Fuel Press - PSI  Test Configuration Flight No. Cime - Min AS - kn 's Altitude - t. Alt Tamp - C. IPM	167 CHE 545 344.5 18120 22 1110 665	1.603 391.5 20080 17 17/0 665	2/M 6,53 328 22060 11	8 76 721 321 34060 7680	56H2 7,88 3,1,5 25960 3	8.55 3 × 3.5 28000 -3 7676 675	9,27 293,3 29940 - <b>B</b> 7660 665	76 70.29 286.5 32020 -13 7690 665	7/2/ 3706 -2/ 77/ 6 6
Fuel Used — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Test Configuration Flight No. Cime — Min AS — kn 's Altitude — t. Air Tamp — C. IPM  Ex. Gas Temp — C. Fuel Used — gal	167 CHE 16 545 344.5 1812.0 22 1110 665	2.6.03 341.5 20080 17	2/M 6,53 328 22060 11	8 76 721 321 34060 7680	56H2 7,88 3,1,5 25960 3	\$ 55 3 0 3 5 2800 0 -3 7670	9,27 293.3 2994.0 - 8	76,29 281,5 32020 -15	1/2 11/1/ 27- 3706 -20
Fuel Used — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Test Configuration Flight No. Cime — Min AS — kn 's Altitude — t. Air Tamp — C. IPM  Ex. Gas Temp — C. Fuel Used — gal	167 CHE 545 344.5 18120 22 1110 665	1.603 391.5 20080 17 17/0 665	2/M 6,53 328 22060 11	8 76 721 321 34060 7680	56H2 7,88 311,5 25960 3 7670	8.55 3 × 3.5 28000 -3 7676 675	9,27 293,3 29940 - <b>B</b> 7660 665	76 70.29 286.5 32020 -13 7690 665	7/2/ 3706 -2/ 77/ 6 6
Fuel Used — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Cest Configuration Flight No. Fime — Min AS — kn + q  Mititude — t. Air Temp — C  PM  The Cas Press — WHg Fuel Flow — gal/hr	167 CHE 545 344.5 18120 22 1110 665	1.603 391.5 20080 17 17/0 665	2/M 6,53 328 22060 11	8 76 721 321 34060 7680	56H2 7,88 311,5 25960 3 7670	8.55 3 × 3.5 28000 -3 7676 675	9,27 293,3 29940 - <b>B</b> 7660 665	76 70.29 286.5 32020 -13 7690 665	7/2/ 3706 -2/ 77/ 6 6
Fuel Used — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Test Configuration Flight No. Cime — Min AS — kn 's Altitude — t. Air Tamp — C. IPM  Ex. Gas Temp — C. Fuel Used — gal	167 CHE 545 344.5 18120 22 1110 665	1.603 391.5 20080 17 17/0 665	2/M 6,53 328 22060 11	8 76 721 321 34060 7680	56H2 7,88 311,5 25960 3 7670	8.55 3 × 3.5 28000 -3 7676 675	9,27 293,3 29940 - <b>B</b> 7660 665	76 70.29 286.5 32020 -13 7690 665	7/2/ 3706 -2/ 77/ 6 6
Fuel Used — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Cest Configuration Flight No. Fime — Min AS — kn + q  Mititude — t. Air Temp — C  PM  The Cas Press — WHg Fuel Flow — gal/hr	167 CHE 545 344.5 18120 22 1110 665	1.603 391.5 20080 17 17/0 665	2/M 6,53 328 22060 11	8 76 721 321 34060 7680	56H2 7,88 311,5 25960 3 7670	8.55 3 × 3.5 28000 -3 7676 675	9,27 293,3 29940 - <b>B</b> 7660 665	76 70.29 286.5 32020 -13 7690 665	7/2/ 3706 -2/ 77/ 6 6
Fuel Used - gal Fuel Flow - gal/hr Fuel Press - PSI Cest Configuration Flight No. Fime - Min AS - kn 's Mititude - to MIT Temp - C RPM Fr. Cas Press - Thg Fuel Flow - gal/hr Fuel Flow - gal/hr Fuel Press - PSI	167 167 16 5.45 349.5 18120 22 1110 665	1.5 A A A A A A A A A A A A A A A A A A A	2/M /6 6:53 320 22060 11 27/0 675 ///	8 /6 721 33 1 74060 675	56H2 7,88 311.5 25960 3 7670 675	8.55 3.23.5 2.8000 -3 76.76 6.75	7660 665	76 70.29 286.5 32020 -13 7690 665	7/2/ 3706 -2/ 77/ 6 6
Fuel Used - gal Fuel Flow - gal/hr Fuel Press - PSI Cest Configuration Flight No. Fime - Min AS - kn 's Mititude - t. Mir Temp - C RPM Ex. Cas. Temp - C Ex. Cas. Temp - C Ex. Cas. Press - Flg Fuel Flow - gal/hr Fuel Fress - PSI	167 167 16 5.45 349.5 18120 22 1110 665	1.5 A A A A A A A A A A A A A A A A A A A	2/M /6 6:53 320 22060 11 27/0 675 ///	8 /6 721 33 1 74060 675	56H2 7,88 311.5 25960 3 7670 675	8.55 3.23.5 2.8000 -3 76.76 6.75	7660 665	76 70.29 286.5 32020 -13 7690 665	7/2/ 3706 -2/ 77/ 6 6
Fuel Used - gal Fuel Flow - gal/hr Fuel Press - PSI  Cest Configuration Flight No. Fime - Min AS - kn 's Air Temp - C  RPM  Ex. Gas. Temp - C  Type Charles - Why Fuel Flow - gal/hr Fuel Flow - gal/hr Fuel Flow - gal/hr Fuel Fress - PSI  Cast Configuration	167 167 16 5.45 349.5 18120 22 1110 665	1.5 A A A A A A A A A A A A A A A A A A A	2/M /6 6:53 320 22060 11 27/0 675 ///	8 /6 721 33 1 74060 675	56H2 7,88 311.5 25960 3 7670 675	8.55 3.23.5 2.8000 -3 76.76 6.75	7660 665	/6 /0:29 286,5 32020 -15 7690 665 /42	7/2/ 3706 -2/ 77/ 6 6
Fuel Used - gal Fuel Flow - gal/hr Fuel Press - PSI  Cest Configuration Flight No. Fime - Min AS - kn 's Air Temp - C  IPM  L. Gas Temp - C  L. Cas Press - Thg  Fuel Flow - gal/hr  Fuel Flow - gal/hr  Fuel Press - PSI  Cast Configuration Flight No.	167 167 16 5.45 344.5 18120 22 1710 665 100	1.665 1.665 1.766	2/M 6,53 328 22060 11 27/0 675	B  /6  721  321  34060  675  //7	SCH1 7.88 3.11.5 25960 3 7670 (75	8.55 3.03.5 18000 -3 76.70 6.75 12.9	9.27 293.3 29940 - B 7660 665 /39	/6 /0:29 286,5 32020 -15 7690 665 /42	7/2/ 3706 -2/ 77/ 6 6
Fuel Used - gal Fuel Flow - gal/hr Fuel Press - PSI  Cest Configuration Flight No. Fime - Min AS - kn 's Air Temp - C  IPM  L. Gas Press - Flo Fuel Flow - gal/hr Fuel Flow - gal/hr Fuel Fress - PSI  Cest Configuration Flight No. Fime - Min	167 167 16 5.45 349.5 18120 22 1110 665 100	1.65 1.65 2.008 2.008 17 17/0 665 106	2/M 6,53 328 22060 11 27/0 675 1//	B  /6  721  321  7680  675  //7	5CH1 7.88 3.11.5 25960 3 7670 6.75 123	7000 8.55 3.23.5 28000 -3 76.76 6.75 12.9 10.06 15.82 23.9	766 0 665 7.39 293.3 29940 665 7.39	/6 /0.19 2865 32020 -15 2690 665 /42	7/. // 22: 3406 -24 734
Tuel Used — gal/hr Tuel Flow — gal/hr Tuel Press — PSI  Cest Configuration Clight No. Lime — Min AS — kn 's Altitude — i. Air Temp — CC LPM Lx Gas Temp — CC LPM Lx Gas Press — Thg Cuel Flow — gal/hr Cuel Flow — gal/hr Cuel Flow — gal/hr Cuel Flow — gal/hr Cuel Flow — PSI  Cest Configuration Clight No. Cime — Min AS — knote	167 167 16 5.45 349.5 18120 22 1110 665 100	1.603 241.5 20080 17 17/0 665 106	2/M 6,53 328 22060 11 27/0 675 7//	B  /6  721  321  7680  675  //7  //443  243	SCH1 7.88 3.11.5 25960 3 7670 (.75 123 (.75,00 15.00	12 9 15,82 13,4 14,00 14,00 15,82 13,9	766 0 665 7.39 293.3 29940 665 7.39	/6 /0.29 2865 32020 -15 2690 665 /42	7/2/ 3706 -2/ 77/ 6 6
Fuel Used - gal Fuel Flow - gal/hr Fuel Press - PSI  Cest Configuration Flight No. Fime - Min AS - kn 's Altitude - t Air Temp - C  RPM  Fx. Cas Press - Flg Fuel Flow - gal/hr	CHE 16 5.45 349.5 18120 22 1110 665 100 CHE 11.93 266 36000	20080 1710 665 1263 254 38040	2/M 6,53 328 22060 11 27/0 675 7/1 13.88 247 40000	B  /6  721  321  34060  675  //7  /443  243  41020	56H2 7.88 311.5 25960 3 7670 675 123 123 123 42060	12 9 15,82 13,4 14,00 14,00 15,82 13,9	9.27 293.3 29940 - B 7660 665 /39	/6 /0.19 2865 32020 -15 2690 665 /42 /7.19 222.5 44680	7/2/ 3706 -2/ 77/ 6 6
Fuel Used - gal Fuel Flow - gal/hr Fuel Press - PSI  Cest Configuration Flight No. Lime - Min AS - kn Air Temp - C  LPM  Lx. Gas Press - "Hg Fuel Flow - gal/hr Fuel Flow - gal/hr Fuel Fress - PSI  Cest Configuration Flight No. Lime - Min AS - knots Lititude = ft Litit	CHE  167  5.45  349.5  18120  22  1710  665  100  CHE  11.93  246  36000  -29	20080 17/0 665 106 1263 254 38040	2/M 6.53 328 22060 11 27/0 675 7// 7// 40000 -35	B  76  72  32  340  60  7680  675  //7  /4.43  2.43  41020  -56	5CH1 7.88 3.11.5 25960 3 7670 675 123 123 42060 43060 43060 43060	7000 8.55 3.03.5 18000 -3 76.70 6.75 12.9 15.82 23.9 48040 -37	9.27 293.3 29940 - B 2660 665 /39	/6 /0.19 2865 32020 -15 2690 665 /42 /7,/4 222.5 44680 -39	7/2/ 3706 -2/ 77/ 6 6
Fuel Used - gal Fuel Flow - gal/hr Fuel Press - PSI  Cest Configuration Flight No. Fime - Min AS - kn Air Temp - C  RPM  Ex. Gas Press - "Hg Fuel Flow - gal/hr Fuel Press - PSI  Cast Configuration Flight No. Fime - Min AS - knots Lititude = ft Air Temp - C  LEM  Cast Configuration Flight No. Fime - Min AS - knots Lititude = ft Air Temp - C  LEM	CHE  167  5.45  349.5  18120  22  1110  665  100  CHE  11,93  266  36000  -29  7720	20080 1710 665 106 1263 254 38040 7740	2/M 6.53 328 3260 11 77/0 675 11/1 4000 -33 7720	B  76  72  32  32  7680  675  //7  /443  243  41020  -56  7730	56H2 7,88 311,5 25960 37670 675 123 42010 -36 7730	12 9 15,82 13,4 14,00 14,00 15,82 13,9	9.27 293.3 29940 - B 7660 665 /39	/6 /0.29 2865 32020 -13 7690 665 /42 /2225 44680 -39 7660	7/2/ 3706 -2/ 77/ 6 6
Fuel Used — gal/hr Fuel Flow — gal/hr Fuel Press = PSI  Cest Configuration Flight No. Fime — Min AS — kn As — Famp — C  The Gas Press — "Hg Fuel Flow — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Cast Configuration Flight No. Fime — Min AS — knote	CHE  167  5.45  349.5  18120  22  1710  665  100  CHE  11.93  246  36000  -29	20080 17/0 665 106 1263 254 38040	2/M 6.53 328 22060 11 27/0 675 7// 7// 40000 -35	B  76  72  32  340  60  7680  675  //7  /4.43  2.43  41020  -56	5CH1 7.88 3.11.5 25960 3 7670 6.75 123 123 42060 43060 43060 43060	7000 8.55 3.03.5 18000 -3 76.70 6.75 12.9 15.82 23.9 48040 -37	9.27 293.3 29940 - B 2660 665 /39	/6 /0.19 2865 32020 -15 2690 665 /42 /7,/4 222.5 44680 -39	7/2/ 3706 -2/ 77/ 6 6
Fuel Used - gal Fuel Flow - gal/hr Fuel Press - PSI  Cest Configuration Flight No. Fime - Min AS - kn As - gal Flow - gal/hr Fuel Flow - gal/hr Fuel Flow - gal/hr Fuel Fress - PSI  Cast Configuration Flight No. Fime - Min AS - knots As -	CHE  167  5.45  344.5  18120  22  1710  665  100  CHE  11.93  246  36000  -24  7720  665	20080 17/0 665 106 1263 254 38040 7740 665	2/M 6.53 328 22060 11 27/0 675 11/1 40000 -33 7720 665	B  /6  721  321  34060  675  //7  /4.43  2.43  41020  -36  7730  665	5CH1 7.88 3.11.5 25960 3 7670 675 123 123 42060 -36 7730 673 6730	12 9 15.82 12.39 12.39 12.39 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.	7.27 293.3 29940 - B 2660 665 /39 /4020 -38 7750 675	/6 /0.19 2865 32020 -15 7690 665 /42 /7,19 222.5 4460 -39 260 -39	7/2/ 3706 -2/ 77/ 6 6
Fuel Used — gal/hr Fuel Flow — gal/hr Fuel Press = PSI  Cest Configuration Flight No. Fime — Min AS — kr  Altitude — t. Alt Temp — C  In. Gas Press — "Hg Fuel Flow — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Cest Configuration Flight No. Fine — Min AS — knote Lititude — ft Lit Temp — C  Lititude — ft Lititude — ft Lititude — gal  Res Press — WHg  Res Lititude — gal	CHE  167  5.45  349.5  18120  22  1110  665  100  CHE  11,93  266  36000  -29  7720	20080 1710 665 106 1263 254 38040 7740	2/M 6.53 328 3260 11 77/0 675 11/1 4000 -33 7720	B  76  72  32  32  7680  675  //7  /443  243  41020  -56  7730	56H2 7,88 311,5 25960 37670 675 123 42010 -36 7730	7000 8.55 3.03.5 18000 -3 76.70 6.75 12.9 15.82 23.9 48040 -37	9.27 293.3 29940 - B 2660 665 /39	/6 /0.29 2865 32020 -13 7690 665 /42 /2225 44680 -39 7660	7/2/ 3706 -2/ 77/ 6 6
Tuel Used — gal/hr Tuel Flow — gal/hr Tuel Press = PSI  Cest Configuration Clight No. Lime — Min AS — kn Lititude — t. Lit Temp — C. Lit. Gas Press — WHg Tuel Flow — gal/hr Luel Flow — gal/hr Luel Press — PSI  Cast Configuration Light No. Lime — Min AS — knote Lititude — ft Lititud	CHE  167  5.45  344.5  18120  22  1710  665  100  CHE  11.93  246  36000  -24  7720  665	20080 17/0 665 106 1263 254 38040 7740 665	2/M 6.53 328 22060 11 27/0 675 11/1 40000 -33 7720 665	B  /6  721  321  34060  675  //7  /4.43  2.43  41020  -36  7730  665	5CH1 7.88 3.11.5 25960 3 7670 675 123 123 42060 -36 7730 673 6730	12 9 15.82 12.39 12.39 12.39 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.82 13.	7.27 293.3 29940 - B 2660 665 /39 /4020 -38 7750 675	/6 /0.19 2865 32020 -15 7690 665 /42 /7,19 222.5 4460 -39 260 -39	7/2/ 3706 -2/ 77/ 6 6

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<u>rest</u>	<u> </u>	LAN 14-1	1 But 1 a	C. Marine C. C.	w		man desert particular to	age over province contempor dist	transportation of the second by
Configuration		CE CAN	14-1	14-1	14-1	14-1	14-1	14-1	14-
Flight No RUN No.	Let in the	1 75	- 19 July -	r 45 /	1.42	.50	62	1 77	187
Time - Min	1 4 6 7		1.20	15.73					
AS - kuots	227	2/2	16 /2		223.5	228	2,32	238	244
Altituda – ft	144 20	44380	144411 CO	44480	44,520	11500		44540	
Air Temp - °C	-44	-14	7530	7530	7540	"A	-4/	7560	-39
RPM	7580	7550	75.70	7530	7540	7550	7550	7560	2560
Ex. Gas Temp - °C	915	3,	1025	235	935	7-15	74.5	955	25
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Ex. Gas Press - "He	307	-> ->	308	309	310	3//	マノラー	3/2	3/
Fuel Used - gal	1200	307	200	27	- 2 L. C.			-	
Fuel Jow - gal/hr		. L						<del> </del>	<del> </del>
Fuel Press - PSI	<u> </u>		<u> </u>	1 ,-		E . No. of Persons and Persons	<u> </u>	1	<u> </u>
rest	AC	CELL	ERAT	10N	AAFERS - 110				
Configuration		CLE	AN						
Flight No = RUN NO.	14-1	14-1	14-1	14-1	14-1	ann i haddining diribinin diribi lake ya Parta	14-2	14-2	14-
TIENT MO = UVIV IVV	92	1.02	カフラ	17,23	1735	Charles merchen debrus de	50.	1-17	. 22
Lima - Min	7/5	255	1 / Lang.	11.50	128	gan ac nghi hiệ nhọc bhí ch nhọc thiế coặc	206	7/7	200
AS knots		422	257	258	158		44400	224	14
Altitude – ft	14160		14110	15 XO	14620				
Air Temp = C	-38	-37	-36	-36	-36		-94		4
RPM	7560	7520	7580	76/0	7740	and a second second second	7750		763
Ex. Gas Temp -°C	9.55	96.5	965	965	825	0 m	675	650	25
Ex. Gas Press - "Hg							l	L	
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Fuel Press - PSI			ET (> A-1	72.0/	e je ny tony je so sipis Mary				
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Fuel Press - PSI  Fest Configuration		14-2	FAN	ngaraga paraga at sandra da	14-2	/4.2	14-2	/4.2	/4.
Fuel Flow - gal/hr Fuel Press - PSI  Fest Configuration Flight No RVN No.		14-2	FAN	14-2	14-2	/4·2 -83	14-2	14.2	1.14
Fuel Press - PSI  Fest Configuration Flight No RVN No.  Fime - Min	/4・L .ヨヱ	14-2	14.2 .52	14-2	14-2	/4·2 -83 28:5	14-2 -93 210.5		1.14
Fuel Press - PSI  Fest Configuration Flight No RVN No. Fime - Min AS - knots	/4-L 32 207	14-2	14-2 152 2//	14-2	14-2	/4·2 -83 -28:5 44440	14-2 -93 210,5		], ]4 222.
Fuel Press - PSI  Fest Configuration Flight No RVN No. Fime - Min AS - knots Altitude - ft	14-2 32 207 44526	14-2 -42 209 14540	14-2 15-2 2/1 44520	14-2 -63 2/2,5 44500	14-2 73-3 34480	/4·2 -83 -28:5 44440	14-2 -93 -210,5 14410		], ]4 222.
Fuel Press - PSI  Fest  Configuration  Flight No RUN No.  Time - Min  AS - knots  Altitude - ft  Air Temp - C	14-2 32 207 44524	14-2 -42 209 14540	14-2 -52 2/1 44520 -94	14-2 .63 2/2.5 44500	-45		-4	2.21.5 44420	1.14 222 444 -4
Fuel Press - PSI  Fest  Configuration  Flight No RUN No.  Time - Min  AS - knots  Altitude - ft  Air Temp - C  RPM	14-2 32 207 4454 -46 7620	14-2 -42 209 14540 -46	14-2 -52 2/1 44520 -94 7620	14-2 63 2/2.5 44500 7670	7610	7620	7620	221.5 44420 -44-	1.14
Fuel Press - PSI  Fest  Configuration  Flight No RUN No.  Time - Min  AS - knots  Altitude - ft  Air Temp - C  RPM	14-2 32 207 44524	14-2 -42 209 14540 -46	14-2 -52 2/1 44520 -94	14-2 63 2/2.5 44500 7670	-45		7620	2.21.5 44420	1.14
Fuel Press - PSI  Fest  Configuration  Flight No RVN No.  Fime - Min  AS - knots  Altitude - ft  Air Temp - C  RPM  Ex. Gas Temp - C  Ex. Gas Press - 8Hg	14-2 3-3- 207 44522 7620	14-2 209 14540 7620	14-2 -5-2 -5-2 -5-2 44520 -5-2 -5-0	14-2 2/2.5 44500 -46 7610	7610	7620 650	7620 650	221.5 44420 -44 7630 650	763
Fuel Press - PSI  Fest  Configuration  Flight No RVN No.  Fime - Min  AS - knots  Altitude - ft  Air Temp - C  RPM  Ex. Gas Temp - C  Ex. Gas Press - 8Hg	14-2 3-3- 207 44522 7620	14-2 -42 209 14540 -46	14-2 -5-2 -5-2 -5-2 44520 -5-2 -5-0	14-2 2/2.5 44500 -46 7610	7610	7620 650	7620 650	221.5 44420 -44 7630 650	763
Fuel Press - PSI  Fost  Configuration  Flight No RVN No.  Time - Min  AS - knots  Altitude - ft  Air Temp - C  RPM  Ex. Gas Temp - C  Ex. Gas Press - #Hg  Fuel Used - gal	14-2 3-3- 207 44522 7620	14-2 209 14540 7620	14-2 -5-2 -5-2 -5-2 44520 -5-2 -5-0	14-2 2/2.5 44500 -46 7610	7610	7620 650	7620 650	221.5 44420 -44 7630 650	763
Fuel Press - PSI  Fast  Configuration  Flight No RVN No.  Time - Min  AS - knots  Altitude - ft  Air Temp - C  RPM  Ex. Gas Temp - C  Fr. Gas Press - "Hg  Fuel Head - gal  Fuel Flow - gal/br	14-2 3-3- 207 44522 7620	14-2 209 14540 7620	14-2 -5-2 -5-2 -5-2 44520 -5-2 -5-0	14-2 2/2.5 44500 -46 7610	7610	7620 650	7620 650	221.5 44420 -44 7630 650	763
Tuel Press - PSI  Configuration  Clight No RVN No.  Cime - Min  AS - knots  Altitude - ft  Air Temp - C  RPM  Ex. Gas. Temp - C  Ex. Gas. Temp	14-2 3-3- 207 44522 7620	14-2 209 14540 7620	14-2 -5-2 -5-2 -5-2 44520 -5-2 -5-0	14-2 2/2.5 44500 -46 7610	7610	7620 650	7620 650	221.5 44420 -44 7630 650	763
Tuel Press - PSI  Configuration  Clight No RVN No.  Cime - Min  AS - knots  Altitude - ft  Air Temp - C  RPM  Ex. Gas. Temp - C  Ex. Gas. Temp	14-2 3-3- 207 44522 7620	14-2 209 14540 7620	14-2 -5-2 -5-2 -5-2 44520 -5-2 -5-0	14-2 2/2.5 44500 -46 7610	7610	7620 650	7620 650	221.5 44420 -44 7630 650	763
Cuel Press - PSI  Configuration Clight No RVN No. Clime - Min AS - knots Altitude - ft Air Temp - C RPM  Ex. Gas Temp - C  Ex. Gas Temp - C  Ex. Gas Press - "Hg  Cuel Flow - gal/br  Fuel Press - PSI	14-1 32 207 4452 -46 7620 650 331	264 14-2 209 14540 7620 650	74-2 2// 44520 44520 650	14-2 .63 2125 44500 -46 7610 650	7610	7620 650	7620 650	221.5 44420 -44 7630 650	763
Fuel Press - PSI  Fost  Configuration  Flight No RVN No.  Fime - Min  AS - knots  Attitude - ft  Air Temp - C  RPM  Tw. Gas Temp - C  Tw. Gas Temp - C  Tw. Cas Press - "Hg  Fuel Flow - gal/hr  Fuel Press - PSI	14-1 32 207 4452 -46 7620 650 331	14-2 209 14540 7620	74-2 2// 44520 44520 650	14-2 .63 2125 44500 -46 7610 650	7610	7620 650	7620 650	221.5 44420 -44 7630 650	763
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Test Configuration Clight No.—RVN No. Clight No.—RVN No. Clight No.—RVN No. Clime - Min  As - knots Attude - ft Air Temp - C  RPM Cx. Gas Temp - C  Cx. Gas Press - "Hg  Cuel Used - gal  Cuel Flow - gal/br  Cuel Press - PSI  Configuration Clight No.—RVN No. Cime - Min	14-2 32 207 4452 -46 2620 850 332	264 14-2 209 14540 7620 650	74-2 2// 44520 44520 650	14-2 .63 2125 44500 -46 7610 650	-45 7610 650 334 14:2 1.65 232	7620 650	7620 650	221.5 44420 -44 7630 650	1.14 -222 1.44 -4.4 -4.5 -5.5 -5.5 -5.5 -6.5 -6.5 -6.5 -6.5 -6
Fuel Press - PSI  Fost  Configuration Flight No RVN No. Flight No RVN No. Fime - Min  AS - knots  Altitude - ft  Air Temp - C  RPM  Ex. Gas Temp - C  Fuel Used - gal  Fuel Flow - gal/br  Fuel Press - PSI  Configuration Flight No RVN No. Fims - Min  AS - knots	14-2 32 207 4452 -46 2620 850 332 ACC	264 14-2 209 14540 7620 650	74-2 2// 44520 44520 650	14-2 .63 2125 44500 -46 7610 650	7610 650 334 14.2 165 232	7620 650 334 14-2 1-74 234	7620 650	221.5 44420 -44 7630 650	1.14 -222 1.44 -4.4 -4.5 -5.5 -5.5 -5.5 -6.5 -6.5 -6.5 -6.5 -6
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Fuel Flow - gal/hr Fuel Press - PSI  Configuration Flight No RUN NO. Flime - Min AS - knots Altitude - ft Air Temp - C  RPM Ex. Gas Press - "Hg Fuel Head - gal/hr Fuel Flow - gal/hr Fuel Press - PSI  Ceat Configuration Flight No RUN NO. Fime - Min AS - knots At Temp - C  RPM Ex. Gas Press - NHg  RY Ex. Gas Press - NHg  RY Ex. Gas Press - NHg	17-1 21-7 19880 2635	ACC C 2 17-1 - 7'2 22-6 7860	E A N	7/0N 17-1 164 19780 7820 89 89 77-1 93 7820 7820 77-1 93 7820 7820 7820	17-1 19180 19180 190 190 100 100 100 100 100 100 100 10	17-1 17-1 18-10 18-10 18-10 17-13 17-13 17-13 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 10 10 10 10 10 10 10 10 10 10 10 10 1	17-1 92 17-1 12-1 273 17880 7620 665	7860 7870 73 73 7880 7620	7645 94 17-12 288 7626
Finel Flow - gal/hr  Finel Press - PSI  Configuration  Flight No RUN NO.  Cime - Min  AS - knots  AS - knots  Cas Press - "Hg  Fuel Head - gal  Fuel Flow - gal/hr  Fuel Press - PSI  Ceat  Configuration  Clight No RUN NO.  Cime - Min  AS - knots  AS - k	17-1 17-1 17880 7630	Acc 17-1 -7-2 7-7860	EL E   17-1   3   7820   7620   7620	7/0N 17-1 164 19780 7820 89 89 19880	17-1 19780 1830 1830 90 17-1 1.03 252 19740	1840 1880 1880 1840 1840 17-1 17-1 262 1980 7620	17-1 92 17-1 12-1 273 17880 7620 665	1980 1870 265 93 171 282 1980 1620	17-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-
Fuel Flow - gal/hr Fuel Press - PSI  Configuration Clight No RUN NO. Clime - Min AS - knots Aftitude - ft Air Temp - C  RM  Cas Press - "Hg  Fuel Head - gal/hr  Fuel Flow - gal/hr  Lonfiguration Clight No RUN NO. Clime - Min AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots  AS - knots	17-1 21-7 19880 2635	ACC C 2 17-1 - 7'2 22-6 7860	E A N	7/0N 17-1 164 19780 7820 89 89 77-1 93 7820 7820 77-1 93 7820 7820 7820	17-1 19180 19180 190 190 100 100 100 100 100 100 100 10	17-1 17-1 18-10 18-10 18-10 17-13 17-13 17-13 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 17-10 10 10 10 10 10 10 10 10 10 10 10 10 1	17-1 92 17-1 12-1 273 17880 7620 665	7860 7870 73 73 7880 7620	17-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-

Test )	JATA (						********	. E	
		F-86F	USAL	No. 51	- 13506				
Test	LACC	ELE	RAI	ION	· · · · · · · · · · · · · · · · · · ·	-			
Configuration		CLBA	W.	r gje, rger delper 4 hanne, gala	· die terr annierte : grap managege			<u> </u>	
Flight NoRUN No.	1771	17.1	17-1	12-1	17-1	17-1	17-1	177-1	177.
Time - Min	4.54	1,67	124	4.89	499	209	2.15	12,25	2.35
AS . knots	198	306	3/4	322	337	340	342	354	36
	19900	19940	19990	19970			19880	19900	1992
Altitude – ft Air Temp – G	3	6	7	8	9	10	12	73	14
RPM	7610	7600	7600	2600	7600		2600	7600	760
Cas Tamp - C	66.5	665	665	665	665	665	265		
Cx. Gar Press - "H				0	- F2 - F2	- C-	- 6 - 3		
	104	103	106	107	108	109	110	111	1/2
Fuel Used - gal	1197	100	1200	1207	12	107	111-	<del> </del>	1//
Fuel Flow - gal/br	<del></del>	<del> </del>				<u> </u>	ļ	<u> </u>	<del> </del>
Eucl Press - PSI		<u> </u>		<u> </u>	<u></u>	<u> </u>	L	1	<u> </u>
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Cost		ELER		<u>N</u>		*******			
Configuration	<u> </u>	LEAN		· · · · · · · · · · · · · · · · · · ·	······································				
Flight No - RVN No.	117:1.	17-1	17-1	17-1	17:1	17-1	17-1	127-1	17-
Time - Min	2.46	3.57	267	2.77	2.87	2,97	3,07	3.12	13,27
AS = knots	1370	378	384	389	394	400	706	410	199
Altituda – ft	19920	19880	19880	19900	19921	19920	19900	19900	199
Air Temp -°C	15	16	17	19	20	21	22	22	7.
RPM	7600	7600	7/10	7620		7620	7620	7620	
Ex. Gas Temp-°C	665	650	465	1.65	650	665	115	650	664
Ex. Cas Press - NHo				14.5					- Bullion
						1 6		<del></del>	12
	117	لخستررا	1 / / 4-	1 ///					
Fuel Hand - mal	113	114	115	116	118	119	120	121	
fuel Hand - gal/hr fuel flow - gal/hr fuel Press - PSI			en alagnikasina termanisasina		77.8	//9	/28	L. 2-1.	
fuel Hand - gal/hr fuel Flow - gal/hr fuel Press - PSI		ÉLE	RATI		778	1/9	/28		
Fuel Flow - gal/hr Fuel Flow - gal/hr Fuel Press - PSI  Cest Configuration			RATIO		1/7-1	17-1	17-1	/7-/	
Fuel Used - gal/hr Fuel Flow - gal/hr Fuel Press - PSI  Configuration Flight No - RUN NO-	AC.C	ELEA ELEA 17-1	RAT (	6N 17-1	17-1	17-/	17-1	/7-/	
Fuel Used - gal/hr Fuel Flow - gal/hr Fuel Press - PSI  Configuration Flight No RUN No Fires - Min	ACC 17-1 3-38	ELE GL&A 17-1 3.48	RAT ( M 17-1 3.58	ON 17-1 3.68	17-1	17-/ 3,88	17-J8	17-1	
Fuel Used - gal/hr Fuel Flow - gal/hr Fuel Press - PSI  Configuration Flight No RUN No. Firms - Min AS - knots	ACC 17-1 338 418	ELE CLEA 17-1 3.48 421	RAT ( N 17-1 3.58 422	17-1 3.68 42.5	17-1 3.78 423	17-/ 3.88 423	17-1 3. 38 42.3	17-1 4:03 1:24	
Fuel Used - gal/hr Fuel Flow - gal/hr Fuel Press - PSI  Configuration Flight No RUN NO.  Time - Min AS - knots  Aithuds - ft	ACC 17-1 338 418 19920	ELE CLEA 17-1 3.48 421 19900	RAT ( N 17-1 3.58 422 19920	17-1 3.68 43.5 14900	17-1 3.78 423 19.800	17-/ 3,88 4)3 /9880	17-1 3, 38 42.3 19880	17-1 4:03 1:24 19880	
Fuel Used - gal/hr Fuel Flow - gal/hr Fuel Press - PSI  Configuration Flight No RUN NO. Time - Min AS - knots Attude - ft Ar Term - C	ACC 17-1 3.38 4/8 19920	ELEA CLEA 17-1 3.48 421 19900	RAT ( N 17-1 3.58 422 19920	17-1 3.68 43.5 14900	17-1 3.78 423 19.800	17-/ 3,88 4)3 /9880	17-1 3, 38 42.3 19880	17-1 4:03 1:24 19880	
Fuel Used - gal Fuel Flow - gal/hr Fuel Press - PSI  Configuration Flight No RUN NO. Time - Min AS - knots Aithuds - ft Air Terry - G	ACC 17-1 338 418 14920 34 7620	ELEA 628A 17-1 3.48 421 19900 25 7620	RAT ( N 17-1 3.58 422 19920	17-1 3.68 43.5 14900	17-1 3.78 423 19.800	17-/ 3,88 4)3 /9880	17-1 3, 38 42.3 19880	17-1 4:03 1:24 19880	
Fuel Hand — gal/hr Fuel Ploy — gal/hr Fuel Press — PSI  Configuration Elight Na — RUN No- Time — Mis AS — knots Attitude — ft Air Temp — C  LPM Ex. Cas Temp — C	ACC 17-1 3.38 4/8 19920	ELEA CLEA 17-1 3.48 421 19900	RAT ( N 17-1 3.58 422 19920	17-1 3.68 42.5	17-1 3.78 423 19.800	17-/ 3,88 4)3 /9880	17-1 3, 38 42.3 19880	17-1 4:03 1:24 19880	
Fuel Hand - gal/hr Fuel Flow - gal/hr Fuel Press - PSI  Configuration Flight No - RUN NO- Time - Min AS - knots Attitude - ft Air Terry - C  PM Ex. Gas Terry - C	ACC 17-1 3-38 448 19920 1-24 7620 650	ELEA 628A 17-1 3.48 421 19900 25 7620 650	RAT ( 17-1 3.58 422 14920 26 7620 650	0N 17-1 3.68 4)3 14900 7630	17-1 3.18 423 19.110 26 7630 650	17-1 3,88 4)3 19880 7630 650	17-1 3.98 423 19880 26 7630 650	17-1 4.03 124 19880 26 7630 650	
Fuel Used - gal/hr Fuel Plow - gal/hr Fuel Press - PSI  Configuration Flight No - RUN NO- Time - Min AS - knots Attitude - ft Air Temp - G  RPM Ex. Gas Temp - G  Tuel Used - gal	ACC 17-1 338 418 14920 34 7620	ELEA 628A 17-1 3.48 421 19900 25 7620 650	RAT ( N 17-1 3.58 422 19920	17-1 3.68 43.5 14900	17-1 3.78 423 19.800	17-/ 3,88 4)3 /9880	17-1 3, 38 42.3 19880	17-1 4:03 1:24 19880	
Fuel Hand — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Fast Configuration Flight No.— RUN NO- Firms — Min AS — knots Attituds — ft Air Temp — C  RPM Fx. Gas Temp — C Fx. Gas Press — BHg Fuel Flow — gal/hr	ACC 17-1 3-38 448 19920 1-24 7620 650	ELEA 628A 17-1 3.48 421 19900 25 7620 650	RAT ( 17-1 3.58 422 14920 26 7620 650	0N 17-1 3.68 4)3 14900 7630	17-1 3.18 423 19.110 26 7630 650	17-1 3,88 4)3 19880 7630 650	17-1 3.98 423 19880 26 7630 650	17-1 4.03 124 19880 26 7630 650	
Fuel Hand - gal/hr Fuel Flow - gal/hr Fuel Press - PSI  Fuel Press - PSI  Fuel Press - PSI  Fuel Press - PSI  Fuel Flow - gal/hr  Fuel Flow - gal/hr	ACC 17-1 3-38 448 19920 1-24 7620 650	ELEA 628A 17-1 3.48 421 19900 25 7620 650	RAT ( 17-1 3.58 422 14920 26 7620 650	0N 17-1 3.68 4)3 14900 7630	17-1 3.18 423 19.110 26 7630 650	17-1 3,88 4)3 19880 7630 650	17-1 3.98 423 19880 26 7630 650	17-1 4.03 124 19880 26 7630 650	
Fuel Hand - gal/hr Fuel Flow - gal/hr Fuel Press - PSI  Fuel Press - PSI  Fuel Press - PSI  Fuel Press - PSI  Fuel Flow - gal/hr  Fuel Flow - gal/hr	ACC 17-1 3-38 448 19920 1-24 7620 650	ELEA 628A 17-1 3.48 421 19900 25 7620 650	RAT ( 17-1 3.58 422 14920 26 7620 650	0N 17-1 3.68 4)3 14900 7630	17-1 3.18 423 19.110 26 7630 650	17-1 3,88 4)3 19880 7630 650	17-1 3.98 423 19880 26 7630 650	17-1 4.03 124 19880 26 7630 650	
Fuel Hand - gal Fuel Flow - gal/hr Fuel Press - PSI  Fast Configuration Flight No RUN NO- Fire - Min AS - knots Aitituds - ft Mr Tarry - C RPM Ex. Gas Tarry - C Fy. Gas Press - NHg Fuel Flow - gal/hr Fuel Fress - PSI	ACC 17-1 338 418 14920 324 7620 650	ELEA 17-1 3.48 421 19900 25 7620 650	2 AT ( ) 17-1 3:58 422 19920 26 7720 650 126	17-1 3.68 43.3 /4900 7/30 6.30	17-1 3.18 423 19.110 26 7630 650	17-1 3,88 4)3 19880 7630 650	17-1 3.98 423 19880 26 7630 650	17-1 4.03 124 19880 26 7630 650	
Fuel Hand - gal/hr Fuel Flow - gal/hr Fuel Press - PSI  Fast Configuration Flight No RUN NO- Fire - Min AS - knots Aitituds - ft Air Terry - C RPM Fw. Gas Terry - C Fw. Gas Terry - C Fw. Gas Press - NHg Fuel Flow - gal/hr Fuel Fress - PSI	ACC 17-1 338 418 14920 324 7620 650	ELE/ ELE/ ELE/ ELE/	RAT ( 17-1 3.58 1920 26 7620 650 126	17-1 3.68 43.3 /4900 7/30 6.30	17-1 3.18 423 19.110 26 7630 650	17-1 3,88 4)3 19880 7630 650	17-1 3.98 423 19880 26 7630 650	17-1 4.03 124 19880 26 7630 650	
Fuel Hand — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Fast Configuration Flight No — RUN NO- Fizna — Min AS — knots Aitituds — ft Air Terrup — C RPM Fr. Gas Terrup — C Fr. Gas Press — NHg Fuel Flow — gal/hr Fuel Fress — PSI  Cest Configuration	ACC 17-1 338 418 14920 324 7620 650	ELEA 17-1 3.48 421 19900 25 7620 650	RAT ( 17-1 3.58 1920 26 7620 650 126	17-1 3.68 43.3 /4900 7/30 6.30	17-1 3.18 423 19.110 26 7630 650	17-1 3,88 4)3 19880 7630 650	17-1 3.98 423 19880 26 7630 650	17-1 4.03 124 19880 26 7630 650	
Fuel Hand — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Configuration Flight No. — RUN NO.  Firms — Min AS — knots  Mittuds — ft Air Terrn — C  RPM  Ex. Gas Terrn — C  Tuel Hand — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Cast  Configuration Flight No. — RUN NO.	ACC 17-1 3.38 448 74920 -24 7620 650 123	ELE/ 17-1 3-18 421 19900 25 7620 650 125	RAT ( 17-1 3.58 1920 26 7620 650 126	17-1 3.68 43.3 /4900 7/30 6.30	/7-1 3/8 423 19.8 (0 26 76.50 /2.8	17-1 3.88 4)3 7780 7630 650 129	17-1 3.38 42.3 19880 26 7630 650 130	17-1 4.03 124 19880 26 7630 650	
Fuel Hand — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Configuration Flight No. — RUN NO- Firms — Min AS — knots  Mittuds — ft Air Terrn — C  RPM Ex. Gas Terrn — C  Tuel Hand — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Cast  Configuration Flight No. — RUN NO.  Cime — Min	ACC 17-1 3.38 448 74920 -24 7620 650 123	ELE/ ELE/ ELE/ ELE/	RAT ( 17-1 3.58 1920 26 7620 650 126	17-1 3.68 43.3 /4900 7/30 6.30	17-1 3.18 423 19.110 26 7630 650	17-1 3.88 4)3 7780 7630 650 129	17-1 3.38 42.3 19880 26 76.30 6.50 130	/7-1 4:03 1:24 /9880 26 7630 650 /31	/7=
Fuel Hand - gal/hr Fuel Flow - gal/hr Fuel Press - PSI  Fast Configuration Flight No RUN NO- Firms - Min AS - knots Mittude - ft Mr Terron - C RPM Ex. Gas Terron - C Typel Hand - gal/hr Fuel Flow - gal/hr Fuel Flow - gal/hr Fuel Flow - gal/hr Fuel Flow - FSI  Cast Configuration Flight No RUN NO. Cime - Min AS - knots	ACC 17-1 3.38 448 74920 -24 7620 650 123	ELE/ 17-1 3-18 421 /9900 25 7620 650 /25	2AT ( 17-1 3.58 122 1492 2620 650 126 126 1785	17-1 3-68 3-25 19900 2-6 7-3-0 12-7	/7-1 3/8 423 19.8 (0 26 76.50 /2.8 /7-2 32 2/3	17-1 3.88 4)3 7730 650 129	17-1 3.38 423 19880 26 7630 650 130	17-1 4.03 124 19880 26 7630 650 131	/7-
Fuel Hand — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Fast Configuration Flight No. — RUN NO- Firms — Min AS — knots Attitude — ft Air Terms—°C RPM Ex. Gas Terms—°C RPM Ex. Gas Terms—°C Tuel Flow — gal/hr Fuel Flow — gal/hr	ACC 17-1 3.38 448 74920 -24 7620 650 123	ELE/ 61-64 17-1 3-48 421 19900 25 7620 650 125 125 125 125 125	RAT ( 17-1 3.58 1920 26 7620 650 126	17-1 3.68 43.3 /4900 7/30 6.30	/7-1 3/8 423 19.8 (0 26 76.50 /2.8	17-1 3.88 4)3 7780 7630 650 129	/7-1 3.38 42.3 /9880 26 7630 6.50 /30 /30 /5.2 7.33 20000	/7-1 4:03 1:24 /9880 26 7630 650 /31	/7-
Fuel Hand — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Fast Configuration Flight No. — RUN NO- Firms — Min AS — knots Attitude — ft Air Terms—°C RPM Ex. Gas Terms—°C RPM Ex. Gas Terms—°C Tuel Flow — gal/hr Fuel Flow — gal/hr	ACC 17-1 3.38 448 19920 -24 7620 650 123	ELE/ 61-64 17-1 3-48 421 19900 25 7620 650 125 125 125 125 125	2AT ( 17-1 3.58 122 1492 2620 650 126 126 1785	17-1 3-68 3-25 19900 2-6 7-3-0 12-7	/7-1 3/8 423 19.8 (0 26 76.50 /2.8 /7-2 32 2/3	17-1 3.88 4)3 7730 650 129	17-1 3.38 423 19880 26 7630 650 130	17-1 4.03 124 19880 26 7630 650 131	/7-
Fuel Hand — gal/hr Fuel Flow — gal/hr Fuel Prass — PSI  Configuration Flight No. — RUN NO- Firms — Min AS — knots  Mittuds — ft Air Terry — C  RPM  Ex. Gas Terry — C  Tuel Flow — gal/hr Fuel Flow — gal/hr Fuel Prass — PSI  Cest Configuration Flight No. — RUN No.  Cime — Min AS — knots  Altitude — ft Air Terry — C	ACC 17-1 3.38 448 19920 -24 7620 650 123 /25 /2580	ELE/ 17-1 3-48 421 19900 25 7620 650 125 125 125 17-2 .03 168 19880	2 AT ( 17-1 3.58 422 19920 2620 650 126 17-2 11-2 11-8-5 14880	17-1 3-68 3-43-5 14900 2-6 7-3-0 12-7 0-1 12-2 1-1 1-2 1-2 1-2 1-2 1-2 1-2 1-2	17-1 3.18 423 19.860 26 7630 650 12.8 17-2 .32 2/3 12840 -4	17-1 3.88 1230 7630 650 129 17-2 172 172 172 1720 1720	17-1 3.38 423 79880 26 7630 650 130 17-2 .52 243 20000 -2	17-1 4.03 124 1480 26 7630 650 131	/.7- 23 7988 -/
Fuel Hand — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Fight No. — RUN NO- Firms — Min AS — knots  Mittuds — ft Air Terry — C  Tuel Hand — gal/hr Fuel Flow — gal/hr Fuel Flow — gal/hr Fuel Flow — gal/hr Fuel Flow — gal/hr Fuel Fress — PSI  Cast  Configuration Flight No. — RUN NO.  Cime — Min AS — knots  Air Terry — C  LPM	ACC 17-1 3.38 448 19920 -24 7620 650 123 /25 /25 /2580 7820	ELE/ 17-1 3-48 421 19900 25 7620 650 125 125 125 127 203 168 128	2671 3.58 422 19920 2620 650 126 17.85 19880 77.22	0N 17-1 3 68 4 3 6 74 900 2 6 76 50 127 6 70 17-2 171 1860 177,0	17-1 3.18 423 19.860 26.50 12.8 17-2 .32 2/3 19840	17-1 3.88 4)3 7730 650 129	/7-1 3.38 423 /9880 26 7630 650 /30 /30 23 293 20000 -2	17-1 4.03 124 128 128 7630 650 131	/7- -7986 -/ -775
Fuel Hand — gal/hr Fuel Flow — gal/hr Fuel Prass — PSI  Fuel Prass — PSI  Fuel Prass — PSI  Fight No. — RUN NO.  Fight — Min AS — knots  ANT Temp — C  Fuel Flow — gal/hr  Fuel Flow — gal/hr  Fuel Prass — PSI  Fuel Flow — gal/hr  Fuel Prass — PSI  Fuel Frass — PSI  Fuel Flow — gal/hr  Fuel Frass — PSI  Fuel Frass — PS	ACC 17-1 3.38 448 19920 -24 7620 650 123 /25 /2580	ELE/ 17-1 3-48 421 19900 25 7620 650 125 125 125 17-2 .03 168 19880	2 AT ( 17-1 3.58 422 19920 2620 650 126 17-2 11-2 11-8-5 14880	17-1 3-68 3-43-5 14900 2-6 7-3-0 12-7 0-1 12-2 1-1 1-2 1-2 1-2 1-2 1-2 1-2 1-2	17-1 3.18 423 19.860 26 7630 650 12.8 17-2 .32 2/3 12840 -4	17-1 3.88 1230 7630 650 129 17-2 172 172 172 1720 1720	17-1 3.38 423 79880 26 7630 650 130 17-2 .52 243 20000 -2	17-1 4.03 124 1480 26 7630 650 131	/.7- 23 7988 -/
Fuel Flaw - gal/hr Fuel Flow - gal/hr Fuel Press - PSI  Fast Configuration Flight No RUN NO. Firms - Min AS - knots Mituds - ft Mr Temp - C  Le Gas Temp - C  Tuel Flow - gal/hr Fuel Fress - PSI  Cest Configuration Flight No RUN NO. Cime - Min AS - knots Mituds - ft Mr Temp - C  LE Gas Press - UHs	ACC 17-1 3.38 448 74920 -24 7620 650 123 (7-2 (7-2 (7-2) 165 (7-2) 165 (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (	ELE/ 17-1 3-18 421 /9900 25 7620 650 /25 /7-2 .03 /68 /2880 675	2 AT ( 17-1 3.58 122 1920 2620 650 126 126 126 126 126 127 1785 19880 1700	17-1 3-68 3-68 3-69 1-29 1-29 1-27 1-11 12860 1-5 1-15 1-15 1-15	/7-1 3/8 423 19.8 (0 26 76.50 /2.8 /2.3 /2.840 77.50 96.5	17-1 3.88 4)3 7730 650 129 17-2 172 172 172 172 172 172 172 172 172 17	/7-1 3.38 423 /9880 26 7630 650 /30 /30 23 243 20000 -2 270	17-1 4.03 124 19880 2630 650 131	/7- -284 -7988 -/ -775 /00
Fuel Hand — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Fuel Press — PSI  Fuel Press — PSI  Fight No. — RUN NO. Fight No. — RUN NO. Fight No. — BHg Fuel Flow — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Fuel Press — PSI  Fuel Flow — gal/hr Fuel Flow — Fuel Flow — Gal/hr Fuel Flow — Fuel Flow — Gal/hr Fuel Flow — Gal/hr Fuel Flow — Gal/hr Fuel Flow — Fuel Flow — Fuel Flow — Fuel Flow — Gal/hr Fuel Flow — Flow — Fuel Flow — Fu	ACC 17-1 3.38 448 19920 -24 7620 650 123 /25 /25 /2580 7820	ELE/ 17-1 3-48 421 19900 25 7620 650 125 125 125 127 203 168 128	2671 3.58 422 19920 2620 650 126 17.85 19880 77.22	0N 17-1 3 68 4 3 6 74 900 2 6 76 50 127 6 70 17-2 171 1860 177,0	17-1 3.18 423 19.860 26 7630 650 12.8 17-2 .32 2/3 12840 -4	17-1 3.88 1230 7630 650 129 17-2 172 172 172 1720 1720	/7-1 3.38 423 /9880 26 7630 650 /30 /30 23 293 20000 -2	17-1 4.03 124 128 128 7630 650 131	/7- -7986 -/ -775
Fuel Hand - gal/hr Fuel Flow - gal/hr Fuel Press - PSI  Cast Configuration Flight No RUN NO.  Cime - Min AS - knots  Withude - ft Ar Temp - C  Le Gas Temp - C  Lest Configuration Flight No RUN No.  Cime - Min AS - knots  Littude - ft Ar Temp - C  LEM  Cas Temp - C  LEM  Cas Temp - C  LEM  Cas Cas Temp - C  LEM  Cas Cas Press - UHs	ACC 17-1 3.38 448 74920 -24 7620 650 123 (7-2 (7-2 (7-2) 165 (7-2) 165 (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (7-2) (	ELE/ 17-1 3-18 421 /9900 25 7620 650 /25 /7-2 .03 /68 /2880 675	2 AT ( 17-1 3.58 122 1920 2620 650 126 126 126 126 126 127 1785 19880 1700	17-1 3-68 3-68 3-69 1-29 1-29 1-27 1-11 12860 1-5 1-15 1-15 1-15	/7-1 3/8 423 19.8 (0 26 76.50 /2.8 /2.3 /2.840 77.50 96.5	17-1 3.88 4)3 7730 650 129 17-2 172 172 172 172 172 172 172 172 172 17	/7-1 3.38 423 /9880 26 7630 650 /30 /30 23 243 20000 -2 270	17-1 4.03 124 19880 2630 650 131	/7- -284 -7988 -/ -775 /00

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TEST 1	DATA (	CORRE	CTED	FOR I	NSTRU:	MENT	ERROL	٠.	
		F-86F	. USAF	No. 51	1-13506				
Test	ACC	ELEI	3971	ON	State of the latest services and the latest of the latest services and the lat	Politicidade de estacione de 200	arte de la company de la compa	,	
Configuration		CLEA		and the Landing Control of the Contr		and firm pulling and		مدار بالتوافق الاستران والتوافق المتحدد والمدار	
Flight No RIIN No.	177-2	77.2	1772	17-	1 17-7-3	17.2	1 77-2	177	17
Time - Min	92	92	1.03	1/3	1 23	124	1.44	1,54	12.
IAS - knots	3015	12/4	3375		376.5	392	710	428	43-
Altitude - ft	19880	19940		19970				20020	
Air Temp - C	3	5	177	a	12200	7770	13000	70076	200
RPM	7760	7760	7760	7726	7780	7790	7790	7800	780
Ex. Gas Temp - C	1000		the second second		990	990	990	975	96
Ex. Gas Press - NH		12000	17000	770	1.7.0	170	7.70	7.63	
Cara Man Prons - "Fi	165	167	169	17-77	173	175	1 7 7	179	18
Fuel Used - gal	1/69	16	7.5	1///	1/2	1 73		<u> </u>	
Fuel Flow - gal/hr	<del> </del>	<del></del>	<del> </del>	<u> </u>			ļ		
Eucl ress PSI	<u> </u>	<u> </u>	1	<u> </u>	L	<u> </u>	L	<u> </u>	L
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Test	176	-54	BAT	10N		·····	·	ور سندومه بروم سودي	
Configuration	<del> </del>		<u> </u>	T	<del></del>			, a x	
Flight No - RUN No.		17-2	17-2	17-2	<b></b>	11-3	17-3	11-3	12-
Time - Min	1.73	1.85	1.25	2.05	<b></b>	0	,09	1/2	125
AS=- knots	1436	7.38	439	938	<b></b>	156	158	162	16
Altitude - ft	112280	177700	19960	19980	<u> </u>	29750	23760	29780	2986
Air Temp-C	126	127	27	28		-28	-20	-28	-26
RPM "	7800	7800	7800			7730	7800	78/0	782
Ex. Gas Temp-°C	965	965	955	955		615	600	625	64
Ex. Gas Press - NHo									
Fuel Used - gal	784	186	188	190		226	226	227	228
									- حادم
	1	I			}	ł	1	1	
Fuel Plow - gal/kr									
Fuel Flow - gal/hr Fuel Press - PSI		ELET	36776	ΣŃ.					
Fuel Flow - gal/hr Fuel Press - PSI  Fest Configuration				) //2-3	17-3	/7-3	/7-3	/2-3	77-
Fuel Flow - gal/hr Fuel Press - PSI  Fest Configuration Flight No RUN NO.		LAA		17-3	The second control of	/7-3	17-3	/2-3	17-
Fuel Flow - gal/hr Fuel Press - PSI  Fest Configuration	17-3	LAA	レ 12-3		/7-3 .80 /97	/Z-3 202	17-3	411	17-
Fuel Flow - gal/hr Fuel Press - PSI  Fest Configuration Flight No - RUN No.  Cime - Min As - knots	/7-3 -39 /240	1-84 12-3 149 1815	12-3 -59 1865	/7-3 /70 /89	197	202		2/4/6	
Fuel Flow - gal/hr Fuel Press - DSI  Fest Configuration Flight No - RUN NO.  Cime - Min AS - knots  Attitude - ft	/7-3 -39 /240 29800	1-84 12-3 149 1815	12-3 -39 1865 29740	/7-3 /89 23740	197	/7-3 202 202 39260	29750	2/4/6	17- 116 216 297-
Fuel Flow - gal/hr Fuel Press - PSI  Fest Configuration Flight No - RUN No. Cime - Min AS - knots  Mittude - ft Air Term - C	/7-3 -39 /740 29800 -27	1-84 12-3 .49 1815 29760 - 27	/7-3 -59 /865 29740 -27	/7-3 /89 23740	.80 197 19760 -26	202 19760 -26	29750 -26	1.11 2.14.6 29740	2971 1
Fuel Flow - gal/hr Fuel Press - PSI  Fest Configuration Flight No - RUN NO. Cime - Min AS - knots  Mittude - ft Air Temp - C	/7-3 /39 /740 23800 -27 78/0	1-84 12-3 .49 1815 29760 - 27	/7-3 -59 /865 29740 -27	77-3 770 789 23740 -27	.80 197 19760 -26	202 19760 -26	29750 -26	1,11 2 <b>/4</b> /6 29740 -25	2979 -12 773
Fuel Flow - gal/hr Fuel Press - PSI  Fast Configuration Flight No - RUN NO. Cime - Min AS - knots  Mitings - ft Air Tamp - C.  IPM Tr. Cas Tamp - C.	/7-3 -39 /740 29800 -27	1-84 12-3 .49 1815 29760 - 27	/7-3 -59 /865 29740 -27	77-3 770 789 23740 -27	.80 197 19760 -26	202 19760 -26	29750 -26	1,11 2 <b>/4</b> /6 29740 -25	2971 1
Fuel Flow - gal/kr Fuel Press - PSI  Fast Configuration Flight No - RUN NO. Cime - Min AS - knots  Mitings - ft Air Temp - C  IPM Cr. Cas Temp - C  Ex. Cas Press - SHo	/7-3 /740 /740 29800 -27 78/0	1-84 12-3 19 1815 29760 -27 7810	17-3 139 1865 2974 -27 1810	/7-3 /89 /89 29740 -27 7780	.80 197 29760 -26 7770	202 19760 -26 7740	29750 -26 7730	1.11 2.14.6 297.40 -25 7730	2979 773 650
Fuel Flow - gal/kr Fuel Press - PSI  Fast Configuration Flight No - RUN NO. Cime - Min AS - knots  Mitings - ft Air Temp - C  IPM Cr. Cas Temp - C  Lx. Cas Press - SHg Fuel Used - gal	/7-3 /39 /740 23800 -27 78/0	1-84 12-3 .49 1815 29760 - 27	/7-3 -59 /865 29740 -27	77-3 770 789 23740 -27	.80 197 19760 -26	202 19760 -26	29750 -26 7730	1,11 2 <b>/4</b> /6 29740 -25	2979 773 650
Fuel Flow - gal/kr Fuel Press - PSI  Fast Configuration Flight No - RUN NO. Cime - Min AS - knots  Mititude - ft Air Temp - C. RPM Fx. Cas. Temp - C. Fx. Cas. Press - SHg Fuel Flow - gal/hr	/7-3 /740 /740 29800 -27 78/0	1-84 12-3 19 1815 29760 -27 7810	17-3 139 1865 2974 -27 1810	/7-3 /89 /89 29740 -27 7780	.80 197 29760 -26 7770	202 19760 -26 7740	29750 -26 7730	1.11 2.14.6 297.40 -25 7730	2979 773 650
Fuel Flow - gal/kr Fuel Press - PSI  Fast Configuration Flight No - RUN NO. Cime - Min AS - knots  Mitings - ft Air Temp - C  IPM Cr. Cas Temp - C  Lx. Cas Press - SHg Fuel Used - gal	/7-3 /740 /740 29800 -27 78/0	1-84 12-3 19 1815 29760 -27 7810	17-3 139 1865 2974 -27 1810	/7-3 /89 /89 29740 -27 7780	.80 197 29760 -26 7770	202 19760 -26 7740	29750 -26 7730	1.11 2.14.6 297.40 -25 7730	2979 773 650
Fuel Flow - gal/kr Fuel Press - PSI  Fast Configuration Flight No - RUN NO. Cime - Min AS - knots  Mititude - ft Air Temp - C. RPM Fx. Cas. Temp - C. Fx. Cas. Press - SHg Fuel Flow - gal/hr	/7-3 /740 /740 29800 -27 78/0	1-84 12-3 19 1815 29760 -27 7810	17-3 139 1865 2974 -27 1810	/7-3 /89 /89 29740 -27 7780	.80 197 29760 -26 7770	202 19760 -26 7740	29750 -26 7730	1.11 2.14.6 297.40 -25 7730	2979 773 650
Fuel Flow - gal/kr Fuel Press - PSI  Configuration Flight No - RUN NO.  Cime - Min AS - knots  Mittude - ft Air Temp - C  RPM Cx. Cas Press - Fig Fuel Flow - gal/hr Fuel Flow - gal/hr Fuel Press - PSI	/7-3 /7-40 /7-40 29800 -2-7 78/0 650	1-84 12-3 -49 1815 29760 -27 7810 22.9	17-3 139 1865 29740 -27 1810	17-3 170 189 20140 -27 1780	.80 197 29760 -26 7770	202 19760 -26 7740	29750 -26 7730	1.11 2.14.6 297.40 -25 7730	2979 -13
Fuel Flow - gal/kr Fuel Press - PSI  Configuration Flight No - RUN NO.  Cime - Min AS - knots  Mittude - ft Air Temp - C  RPM  Tx. Cas Temp - C  Fx. Cas Press - FHg  Fuel Flow - gal/hr  Fuel Press - FSI  Cast	77-3 .39 /740 29800 -2-7 7810 650	- 54 12-3 .49 1815 29760 - 27 7810 229	17-3 -39 -39 -29740 -27 -27 -2810 230	17-3 170 189 20140 -27 1780	.80 197 29760 -26 7770	202 19760 -26 7740	29750 -26 7730	1.11 2.14.6 297.40 -25 7730	2979 773 650
Fuel Flow - gal/kr Fuel Press - PSI  Fast Configuration Flight No - RUN NO. Flight - Min AS - knots  Mittude - ft Air Temp - C  RM Fx. Cas. Temp - C  Fx. Cas. Press - FHg Fuel Flow - gal/hr Fuel Press - FSI  Cas. Cas. Cas. Cas. Cas. Cas. Cas. Cas.	77-3 .39 /740 29800 -2-7 7810 650	18/5 18/5 29760 -27 78/0 229	77-3 -39 -39740 -27 -27 -2810 230	17-3 170 189 20140 -27 1780	.80 197 29760 -26 7770	202 19760 -26 7740	29750 -26 7730	1.11 2.14.6 297.40 -25 7730	2979 773 650
Fuel Flow - gal/hr Fuel Press - PSI  Fest Configuration Flight No RUN NO. Firms - Min AS - knots  Mitude - ft Mr Temp - C  IPM  Tx Cas Press - Fig Fuel Flow - gal/hr Fuel Press - PSI  Cast Configuration Flight No RUN No.	77-3 .39 /740 29800 -2-7 7810 650	- 54 12-3 .49 1815 29760 - 27 7810 229	77-3 -39 -39 -29740 -27 -28/0 230	231 27-3 237-60 237-60 231	.80 197 29760 -26 7770	202 19760 -26 7740	29750 -26 7730	1.11 2.14.6 297.40 -25 7730	2974
Fuel Flow - gal/kr Fuel Press - PSI  Fast Configuration Flight No RUN NO. Firms - Min  AS - knots  Mittude - ft  Mr Temp - C  IPM  Fr. Gas Temp - C  Lx. Gas Press - Flig  Fuel Flow - gal/hr  Fuel Press - PSI  Cast Configuration  Hight No RUN No.  Sime - Min	77-3 1740 29800 -2-7 7810 650 229	1.2-3 1.49 1.61.5 29760 - 27 7810 239	77-3 -39 -29740 -27 -27 -2810 230	17-3 170 20740 -27 2780 231	18° 197 19760 -26 7700 -231	202 19760 -26 2740 -232	29750 -26 7730	1.11 2.14.6 297.40 -25 7730	2974 -1. 273 636 2.3 17- 2.0
Fuel Flow - gal/hr Fuel Press - PSI  Fest Configuration Flight No RUN NO. Firms - Min AS - knots  Mitude - ft Mix Temp - C  IPM  Ex. Gas Temp - C  Ix. Gas Press - Fig Fuel Flow - gal/hr Fuel Press - PSI  Cast Configuration Flight No RUN No.  Ima - Min AS - knots	77-3 1740 23800 -27 7810 650 229	1.2-3 1.49 1.61.5 29760 -27 7.810 23.9 ELE 1.7-3 1.31 1.33.5	77-3 -39 -29740 -27 -27 -2810 230	17-3 170 170 23740 -27 1780 231	137 19760 -26 270 231 17-3 1.61 243	203 29760 -26 2740 232 /7-3 /73 249	29750 -26 7730 233 	17-3 1.92 26/	2974 -1. -273 -650 -231 
Fuel Flow - gal/hr Fuel Press - PSI  Lest Configuration Flight No RUN NO. Cime - Min AS - knots  Mittude - ft Air Temp - C  IPM  Lx. Gas Temp - C  Lx. Gas Press - FHg  Fuel Flow - gal/hr  Fuel Flow - gal/hr  Fuel Press - PSI  Last Configuration Light No RUN No. Lime - Min AS - knots  Lititude - ft	77-3 1740 23800 -27 7810 650 229	1.2-3 1.8/5 29760 -27 1810 239 239 17-3 17-3 1735 29800	77-3 -39 -29740 -27 -27 -27 -27 230 230 23800	17-3 -27 1780 -27 1780 231 231 23800	17-3 19760 2770 2770 231	17-3 19740 17-3 17-3 17-3 17-3 249 29740	29750 -26 7730 233 	17146 29740 -25 7730 233 17-3 192 261 29740	2974 -1. -273 -650 -231 
Fuel Flow - gal/hr Fuel Press - PSI  Fuel Press - PSI  Finel Press - PSI  Fine - Min AS - knots  Attude - ft Att Temp - C  IPM  Fx. Gas Temp - C  Fy. Gas Press - FHg  Fyel Flow - gal/hr  Fyel Flow - gal/hr  Fyel Press - PSI  Fyel Press - PSI  Fyel Press - FSI  Fyel Press - FSI  Fyel Figuration  Fight No RUN No.  Fyel Figuration  Fight No RUN No.  Fyel Figuration  Fyel Figuration  Fyel Fyel Fyel Fyel  Fyel Figuration  Fyel Fyel Fyel  Fyel Fyel  Fyel Fyel  Fyel Fyel  Fyel Fyel  Fyel Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel  Fyel	A C C 17-3 1740 23800 -27 7810 650 229 17-3 121 219.5 23710 -24	1.2-3 1.67.5 29760 -27 1810 1239 17-3 1735 29800 -24	77-3 -39 -29740 -27 -27 -28/0 23800 -23	17-3 -27 1780 -27 1780 231 231 236 23800 -22	17-3 19760 2770 231 231 243 29760	17-3 19740 17-3 17-3 17-3 29740 29740	29750 -26 7730 233 -253 -255 19710 -20	17-3 19740 -25 773e 233 192 261 29740 -20	2974 -1. 273 63° 2.3° 2.0 2.6 2.974 -19
Fuel Flow - gal/hr Fuel Press - PSI  Fest Configuration Flight No RUN NO. Firms - Min AS - knots  Mitude - ft Mix Temp - C  IX Cas Press - Fig Fuel Flow - gal/hr Fuel Flow - gal/hr Fuel Press - PSI  Cast Configuration Flight No RUN No. Ima - Min AS - knots  Mitude - ft Mix Temp - C  PM	A C C 17-3 1740 23800 23800 -27 7810 650 229 17-3 121 2195 23910 -24 7730	1.2-3 1.67.5 29760 -27 1810 1239 17-3 1735 29800 -24	77-3 -39 -29740 -27 -27 -27 -27 230 230 23800	17-3 -27 1780 -27 1780 231 231 236 23800 -22	17-3 19760 2770 2770 231	17-3 19740 17-3 17-3 17-3 17-3 249 29740	29750 -26 7730 233 	17146 29740 -25 7730 233 17-3 192 261 29740	2974 -1. 273 636 2.3 2.6 2.6 2.976 2.976 2.79
Fuel Flow - gal/hr Fuel Press - PSI  Lest Configuration Flight No RUN NO. Firms - Min AS - knots  Attitude - ft Air Temp - C  The Cas Temp - C  The Press - SHg  Fuel Flow - gal/hr  Fuel Press - PSI  Cast Configuration Flight No RUN No.  Lime - Min AS - knots  Lititude - ft AS Temp - C  LYM  LYM  LYM  LYM  LYM  LYM  LYM  LY	A C C 17-3 1740 23800 -27 7810 650 229 17-3 121 219.5 23710 -24	1.2-3 1.67.5 29760 -27 1810 1239 17-3 1735 29800 -24	77-3 -39 -29740 -27 -27 -28/0 23800 -23	17-3 -27 1780 -27 1780 231 231 236 23800 -22	17-3 19760 2770 231 231 243 29760	17-3 19740 17-3 17-3 17-3 29740 29740	29750 -26 7730 233 -253 -255 19710 -20	17-3 19740 -25 773e 233 192 261 29740 -20	2974 -1. 273 636 2.3 2.6 2.6 2.976 2.976 2.79
Fuel Flow - gal/hr Fuel Press - PSI  Fuel Press - PSI  Fuel Press - PSI  Fuel Press - Min  AS - knots  Attrace - ft  Ar Temp - C  Fuel Press - PHg  Fuel Press - PSI  Fuel	A C C 17-3 1740 23800 23800 17-17 250 229 17-3 121 2195 239710 214 2730 650	ELE 173.39 181.5 29760 29760 23.9 17.3 17.3 173.5 29800 214 7720	77-3 -39 -29740 -27 -27 -27 -290 230 230 230 230 230 230 230 230 230 23	17-3 -27 1780 -27 1780 231 231 23800 -22 7720	17-3 19760 -26 7770 231 243 29760 -12 2720	17-3 19740 17-3 17-3 29740 29740 29740	29750 -26 7730 253 -253 -255 19720 -20 7720	17-3 19740 -25 2730 233 261 29740 -20 7720	2974 -1. -2.3 636 2.3 2.0 -2.6 2.976 -19 272 6.5
Fuel Flow - gal/kr Fuel Press - PSI  Lest Configuration Flight No RUN NO. Firms - Min AS - knots  Attrace - ft Ar Temp - C  RM  L. Gas Temp - C  Track - gal/hr  Fuel Flow - gal/hr  Fuel Press - PSI  Lest Configuration Flight No RUN No.  Lime - Min AS - knots  Littude - ft As Temp - C  Lest Gas Fress - Thg  Luck Gas Fress -	A C C 17-3 1740 23800 23800 -27 7810 650 229 17-3 121 2195 23910 -24 7730	1.2-3 1.67.5 29760 -27 1810 1239 17-3 1735 29800 -24	77-3 -39 -29740 -27 -27 -28/0 23800 -23	17-3 -27 1780 -27 1780 231 231 236 23800 -22	17-3 19760 2770 231 231 243 29760	17-3 19740 17-3 17-3 17-3 29740 29740	29750 -26 7730 233 -253 -255 19710 -20	17-3 19740 -25 773e 233 192 261 29740 -20	2974 -1. 273 636 2.3 2.6 2.6 2.976 2.976 2.79
Fuel Flow - gal/kr Fuel Press - PSI  Lest Configuration Flight No RUN NO. Cime - Min AS - knots  Attrace - ft Ar Temp - C  R. Ges Temp - C  R. Ges Press - SHg  Fuel Flow - gal/hr  Fuel Press - PSI  Cast Configuration Light No RUN No. Cime - Min AS - knots  Littude - ft Ar Temp - C  R. Ges Press - SHg  Luck Flow - gal/hr  Luck Cast Temp - C  R. Ges Press - SHg  Luck Flow - gal/hr	A C C 17-3 1740 23800 23800 17-17 250 229 17-3 121 2195 239710 214 2730 650	ELE 173.39 181.5 29760 29760 23.9 17.3 17.3 173.5 29800 214 7720	77-3 -39 -29740 -27 -27 -27 -290 230 230 230 230 230 230 230 230 230 23	17-3 -27 1780 -27 1780 231 231 23800 -22 7720	17-3 19760 -26 7770 231 243 29760 -12 2720	17-3 19740 17-3 17-3 29740 29740 29740	29750 -26 7730 253 -253 -255 19720 -20 7720	17-3 19740 -25 2730 233 261 29740 -20 7720	2974 -1. -2.3 -2.3 -2.0 -2.6 -2.9 -1.9 -1.9 -1.9 -1.9 -1.9 -1.9 -1.9 -1
Fuel Flow - gal/kr Fuel Press - PSI  Fuel Press - PSI  Fuel Press - PSI  Fuel Flow - Gas Temp - C  Fuel Flow - gal/kr  Fuel Flow - gal/kr  Fuel Press - PSI  Fuel Press - PSI  Fuel Flow - gal/kr  Fuel Fress - PSI  Fuel Flow - FII  Fuel Fress - FII  Fuel Flow - Gas Fress - F	A C C 17-3 1740 23800 23800 17-17 250 229 17-3 121 2195 239710 214 2730 650	ELE 173.39 181.5 29760 29760 23.9 17.3 17.3 173.5 29800 214 7720	77-3 -39 -29740 -27 -27 -27 -290 230 230 230 230 230 230 230 230 230 23	17-3 -27 1780 -27 1780 231 231 23800 -22 7720	17-3 19760 -26 7770 231 243 29760 -12 2720	17-3 19740 17-3 17-3 29740 29740 29740	29750 -26 7730 253 -253 -255 19720 -20 7720	17-3 19740 -25 2730 233 261 29740 -20 7720	2974 -1. -273 636 2.3 2.0 -2.6 2.976 -19 272 6.5
Fuel Flow - gal/kr Fuel Press - PSI  Cost Configuration Flight No RUN NO. Cime - Min AS - knots AS - Fress - SHg Fuel Flow - gal/hr Fuel Press - PSI  Cast Configuration Light No RUN No. Cime - Min AS - knots AS - K	A C C 17-3 1740 23800 23800 17-17 250 229 17-3 121 2195 239710 214 2730 650	ELE 173.39 181.5 29760 29760 23.9 17.3 17.3 173.5 29800 214 7720	77-3 -39 -29740 -27 -27 -27 -290 230 230 230 230 230 230 230 230 230 23	17-3 -27 1780 -27 1780 231 231 23800 -22 7720	17-3 19760 -26 7770 231 243 29760 -12 2720	17-3 19740 17-3 17-3 29740 29740 29740	29750 -26 7730 253 -253 -255 19720 -20 7720	17-3 19740 -25 2730 233 261 29740 -20 7720	2974 -1. -2.3 -2.3 -2.0 -2.6 -2.9 -1.9 -1.9 -1.9 -1.9 -1.9 -1.9 -1.9 -1

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Configuration	-	CLB	*/	بيريونون داد درونونون بالتي	entropological districtions and	minima edy) (paperily)	Salt Marks Constitutions		e marinistra
Fligh' No RUN NO.	12-3.	4		and the sale of th			MARINER AND A STATE OF THE STAT	<u> </u>	- LL
Time Min	12.12.	13 23	The state	Rita	1200	2.62	212	2.79	2.8
IAS knots	2. Zd.	228		2885	294.5	1301.5	29760	311.5	13/5
Altitude - ft	2.2280	2.9760	2.9760	29760		122760		29740	3972
Air Temp - °C	-18	12	-/-	45	-29	-13	-/2	-11	1-4
RDM.	7770	4		<del></del>		************************			7,73
Ex. Cas Temp - C	650					2 - Control	The street and the street and		65
Ex. Gas Press - "He	-	+	-	243	-5-73-			296	24
Euc Used - gal	271.	243	242	442	<u> </u>	2.45	246	<u> </u>	Z7.
Fual Flow - gal/hr	<del></del>				ļ		ļ <u></u>	ļ	<del> </del>
Funl Press - PSI	L		L		L	I	<del></del>	L	<b>↓</b>
**************************************	120 5 5	FLEI	245 77	01/					
Configuration		CLEA		<u> Y</u>		. <del>//</del>			
Configuration Flight No RVN No.	17-3				<u> </u>				17-
Time - Min	3,20	7	3.20	3.30	3,35	3,45	3.55	3.66	15/3
Ina - Min IAS . knots	322	326	332	3336	340.5		322	350	34
	29720		29760				29700		
Altitude – ft	-9	8	41160	79470	K2 /20	12000	27/00	2700	142/3
Air Temp -°C			7710	77/0	77/0	777	177	7	1 - 2
NPM .	7720	7720	110	1110	1//0	7710		390	667
Cx. Gas Temp-°C	650						650	240	36
Cx. Gas Press - Hig				<b> </b>	<u> </u>	<del> </del>	<u> </u>		-
Fuel Used - gal	298	2 48	749	250	2.5/	751	252	255	122
Fuel Flow - gai/hr Fuel Press - PSI									
Fuel Flow - gal/hr Fuel Press - PSi Test		ELE		ON					
Fuel Flow - gal/hr Fuel Press - PSi  Fest Configuration		ELEA		ON					
Fuel Flow - gal/hr Fuel Press - PSI  Configuration Flight No RUN No.	17-1	K-LEA		ON.					17-4
Fuel Flow - gal/hr Fuel Press - PSi  Configuration Flight No RUN No.  Time - Min	17-1	,05	N .15	,2 6	,36	. 36	256	1.66	127
Fuel Flow - gal/hr Fuel Press - PSI  Configuration Flight No RUN No. Firms - Min AS - knots	17-1	,03 155	N 15 163	173	185.5	196	206	2/6,5	22
Fuel Flow — gal/hr Fuel Press — PSI  Configuration Flight No. — RUN No.  Time — Min AS - knots  Altitude — ft	17-1 0 159 29800	,05	N 15 163	.26 173 21800	185,5	196		29780	2 2 1 2 2 6 2980
Fuel Flow - gal/hr Fuel Press - PSI  Fast Configuration Flight No RUN No. Time - Min AS - knots Altitude - ft Air Temp - C	17-1 0 159 29800 -29	,03 155 29800 -29	N 163 29800 -28	.26 173 27800 -28	185,5 29800 -28	196 29780 -28	206 29760 -27	216,5 29780 -26	22 22 2980 -2
Fuel Flow - gal/hr Fuel Press - PSI  Fast Configuration Flight No RUN No. Time - Min AS - knots Altitude - ft Air Temp - C	17-1 0 159 29800 -29	,03 ,55 29800 -29 7800	N 163 29800 -28 7630	173 27800 -28 7600	185,5 29800 -28 7550	196 29780 -28 7350	206 29760 -27 2550	216,5 29780 -26 7550	226 2980 -2 756
Fuel Flow - gal/hr Fuel Press - PSI  Configuration Flight No RUN No.  Time - Min AS - knots Altitude - ft Air Tamp - C  IPM  Ex. Gas Tamp - C	17-1 0 159 29800 -29	,03 155 29800 -29	N 163 29800 -28 7630	.26 173 27800 -28	185,5 29800 -28 7550	196 29780 -28	206 29760 -27	216,5 29780 -26	226 2980 -2 756
Fuel Flow - gal/hr Fuel Press - PSI  Configuration Flight No RUN No.  Time - Min AS - knots Altituds ft Air Tamp -°C  LPM  Ex. Gas Tamp -°C	12-1 0 15-9 29800 -29 7680 590	,03 155 29800 -29 7800 650	N 163 29800 -28 7650 860	173 27800 -28 7600 890	185.5 29800 -18 7550 925	196 29780 -28 7350 935	2760 -27 -27 2530 245	216,5 29780 -26 7550 995	7980 -2: 756 965
Fuel Flow - gal/hr Fuel Press - PSI  Fuel Press - PSI  Fuel Press - PSI  Fuel Press - PSI  Fuel Press - RUN No.  Flight No RUN No.  Fuel Flow - Flight No Run Press - Run  Fuel Hand - gal	17-1 0 159 29800 -29	,03 ,55 29800 -29 7800	N 163 29800 -28 7630	173 27800 -28 7600	185,5 29800 -28 7550	196 29780 -28 7350	206 29760 -27 2550	216,5 29780 -26 7550	22 2980 -2 756 965
Fuel Flow - gal/hr Fuel Press - PSI  Fuel Press - PSI  Fuel Press - PSI  Fuel Press - PSI  Fuel Flow - Gal/hr  Fuel Flow - gal/hr	12-1 0 15-9 29800 -29 7680 590	,03 155 29800 -29 7800 650	N 163 29800 -28 7650 860	173 27800 -28 7600 890	185.5 29800 -18 7550 925	196 29780 -28 7350 935	2760 -27 -27 2530 245	216,5 29780 -26 7550 995	22 2280 2980 -2 756 965
Fuel Flow - gal/hr Fuel Press - PSI  Fuel Press - PSI  Fuel Press - PSI  Fuel Press - PSI  Fuel Press - RUN No.  Flight No RUN No.  Fuel Flow - Flight No Run Press - Run  Fuel Hand - gal	12-1 0 15-9 29800 -29 7680 590	,03 155 29800 -29 7800 650	N 163 29800 -28 7650 860	173 27800 -28 7600 890	185.5 29800 -18 7550 925	196 29780 -28 7350 935	2760 -27 -27 2530 245	216,5 29780 -26 7550 995	22 2980 -2 756 965
Fuel Flow - gal/hr Fuel Press - PSI  Configuration Flight No RUN No.	17.1 0 15.9 29.800 -29 7680 590	155 29800 -29 7800 650	N 163 29800 -28 7630 860	173 27800 -28 7600 890	185.5 29800 -18 7550 925	196 29780 -28 7350 935	2760 -27 -27 2530 245	216,5 29780 -26 7550 995	22 2280 2980 -2 756 965
Fuel Flow - gal/hr Fuel Press - PSI  Fuel Press - PSI  Fuel Press - PSI  Fuel Press - PSI  Fuel Flow - Gal/hr  Fuel Flow - gal/hr	17.1 0 15.9 29.800 -29 7680 590	280 280 280 290 280 280	1.15 163 29800 -28 7130 860 281	173 27800 -28 7600 890	1855 29800 -18 7550 925	196 29780 -28 7350 935	2760 -27 -27 2530 245	216,5 29780 -26 7550 995	22 2280 2980 -2 756 965
Fuel Flow - gal/hr Fuel Press - PSI  Fast  Configuration Flight No RUN No.  Firme - Min  AS - knots  Altitude - ft  Air Temp - C  RPM  Fx. Gas Temp - C  Two Gas Press - SHg  Fuel Hand - gal/hr  Fuel Flow - gal/hr  Fuel Press - PSI  Fast  Configuration	17.1 0 15.9 29.800 -29 7680 590	155 29800 -29 7800 650	1.15 163 29800 -28 7130 860 281	173 27800 -28 7600 890	1855 29800 -18 7550 925	196 29780 -28 7350 935	2760 -27 -27 2530 245	216,5 29780 -26 7550 995	22 2280 2980 -2 756 965
Fuel Flow - gal/hr Fuel Press - PSI  Configuration Flight No RUN No. Flight No RUN No. AS: knots Altitude - ft Air Temp - C RPM Ex. Gas Temp - C Tx. Gas Press - SHg Fuel Heed - gal/hr Fuel Flow - gal/hr Fuel Press - PSI  Fest Configuration Flight No RUN No.	17.1 0 15.9 29.800 -29 7680 590	280 280 280 290 280 280	1.15 163 29800 -28 7130 860 281	173 27800 -28 7600 890	1855 29800 -18 7550 925	196 29780 -28 7350 935	2760 -27 -27 2530 245	216,5 29780 -26 7550 995	2 2 3 2 3 2 5 3 5 6 5 6 5 6 6 6 6 6 6 6 6 6 6 6 6 6
Fuel Flow - gal/hr Fuel Press - PSI  Fast  Configuration Flight No RUN No.  Flight No RUN No.  Flight No RUN No.  As - knots  Altitude - ft  Air Temp - C  RPM  Fx. Gas Temp - C  Tx. Gas Press - SHg  Fuel Heed - gal/hr  Fuel Flow - gal/hr  Fuel Press - PSI  Fost  Configuration Flight No RUN No.  Fime - Min	17-1 0 159 29800 7680 590 279	155 29800 7800 650 280	163 29800 -28 7690 860 281	173 27800 -28 7600 890 282	1855 29 100 -18 -1550 925 284	196 29780 -28 7350 935 285	200 29760 -27 2530 245 286	2/6,5 29780 -26 7550 975 287	2 2 3 2 3 2 5 3 5 6 5 6 5 6 6 6 6 6 6 6 6 6 6 6 6 6
Fuel Flow - gal/hr Fuel Press - PSI  Fast  Configuration Flight No RUN No.  Firme - Min  AS - knots  Altitude - ft  Air Temp - C  RPM  Fx. Gas Temp - C  Two Gas Press - SHg  Fuel Hand - gal/hr  Fuel Flow - gal/hr  Fuel Press - PSI  Fast  Configuration	17-1 0 159 29800 7680 590 279 279	155 29800 7800 650 280	1.07 2.64	173 27800 -28 7600 890 282	1855 29100 -18 -1550 925 284 	196 29780 -28 7350 935 285 	206 29760 -27 2530 245 286	2/6/5 29780 -26 7550 975 287	12-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-
Fuel Flow - gal/hr Fuel Press - PSI  Configuration Flight No RUN No. Firms - Min AS - knots Altitude - ft Air Temp - C  RPM Ex. Gas Temp - C  Typel Flow - gal/hr Fuel Flow - gal/hr Fuel Press - PSI  Configuration Flight No RUN No. Firms - Min AS - knots  Altitude - ft	17-1 0 159 29800 7680 590 279 279 17-1 239 19820	- LEA - 155 29800 - 29 - 7800 - 650 - 280 - 280 - 280 - 291 - 252 - 29800	163 29800 -28 7690 860 281	173 21800 -28 7600 890 282 0N	1855 29800 -18 7550 925 284 -117 2885 29840	196 29780 -28 7350 935 285 285 3015 29860	206 29760 -27 2530 245 286 3765 29820	2/6/5 29780 -26 7550 975 287	17- 280 280 280 280 280 280 343 2986
Fuel Flow - gal/hr Fuel Press - PSI  Configuration Flight No RUN No. Firms - Min AS - knots Altitude - ft Air Temp - C  RPM Ex. Gas Temp - C  Typel Flow - gal/hr Fuel Flow - gal/hr Fuel Press - PSI  Configuration Flight No RUN No. Firms - Min AS - knots  Altitude - ft	17-1 0 159 29800 7680 590 279 279	29800 29800 29800 280 280 280 280 252 29800	163 29800 -28 7690 281 281 29280 -20	173 27800 -28 7600 890 282	1855 29100 -18 7550 925 284 -137 2885 29840	196 29780 -28 7350 935 285 285 -137 3015 29860	206 29760 -27 2530 245 286 -197 29820	2/6/5 29780 -26 7550 975 287 287 -330 29820 -//	17- 280 280 280 280 280 280 280 288 2986
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Configuration	1 .	أتبال بنبال دبيا	eriv.			v. v Marie Harris armatyrique		~ anatomidentes dil 1	
Flight No RUN No.	447.7	124	11.1	12.1	, <del>(1.                                    </del>	-	~	· · · · · · · · · · · · · · · · · · ·	·
Time - Min	1428		4.77	2.09		The state of the s			<b></b>
IAS - knots	356	36/15	363.3	369.5		<b></b>	Herrican and a company of		A. 100-14 A
Altitude – ft Air Temp – ^e C	29840	127.750	2.9780	127780	7				<b></b> _
Alf Temp - C	7740	1553	1-3-	1	-			-	<u> </u>
RPM		1000	7290	7740	<del> </del>	<del> </del>			ļ
Ex. Gas Temp - °C Ex. Gas Press - "Ho	1000	1000	17000	1320	<del> </del>			ļ	
Fuel Used - gal	302	t3.7	1010	308	+	<del> </del>	<b></b>	<b></b>	ļ
Fuel Flow - gel/hr	1220	309	1300	1000	<del></del>	<b></b>	<del> </del>	<del> </del>	<del> </del>
Fuel Press - PSI				Server - Halfle Alisa Caselo			<u> </u>	<u> </u>	
Test	1 40	A V / 44	1245 1	£124	7 <b>E</b> 7	1745	1.75		<del></del>
Configuration	1-4	AXIM			5,46	分子子		PRAI	<b>d</b>
Flight No.	17	-	THE STATE OF		1/7	6	111	77	フラ
Cime - Min	<del>                                     </del>		<b></b>	<del>  ~~</del>	<del>                                     </del>	7	<del>                                     </del>	<del>                                     </del>	1-1-2
AR-knots	2.50	234	50/	2.27	222	227	3.00	470	37
Altitude – ft	13531	20300	21/20	2000	122	1300	7785	17867	3/4
Air Temp - C	-22	7-18	-27	-27	-22	-36		1375	14
RPM	7/20	ファラハ	7700	フタカハ	7720	ラシスク	9210	1000	7/1
Ex. Gas Temp - C	1010	7770	900	720	476	945	1025		49
Cx. Gas Press - "Ha						7-14	-/	Para	2.22
	L						<del></del>	<del></del>	
Tuel Used - gal		1		j	ł		3		
fuel Hand — gal fuel Flow — gal/hr									
Fuel Hand — gal Fuel Flow — gal/hr Fuel Press — PSI	MA	×MU	ML	EVEL	بسارهم	6HT	4/83	PEEL	
Fuel Used — gal Fuel Flow — gal/hr Fuel Press — PSI Cast Configuration	MA	XIMU	ML	EVEL	12/17 W/17	6HT HOUT	A/R3	PEE L	
Fuel Used — gal Fuel Flow — gal/hr Fuel Press — PSI Cast Configuration Flight No.	MA 14	× IM II	ML	EVEL	P.L.	ed T Hout	A/R3	PEEL	
Fuel Used — gal Fuel Flow — gal/hr Fuel Press — PSI Configuration Flight No.	19-	17	17		PL, WIT	6HT HOUT	A/RS	P&&L	
Fuel Used — gal Fuel Flow — gal/hr Fuel Press — PSI Configuration Flight No.	19-	17	17		PL, WIT	6HT HOUT	A/RS	Par (	
Fuel Used — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Cast Configuration Flight No. Cirne — Min. AS — knots  Mititude — ft	79- 256 4430	424 19880	350		PLI	6HT HOUT	A/RS	Per C	
Fuel Used - gal Fuel Flow - gal/hr Fuel Press - PSI  Cest Lonfiguration Clight No. Cizne - Min AS - knots Mititude - ft	75.6 44.80	424 19880	350 29700		P1.	6HT HOUT	A/RS	Pss.	
Fuel Used - gal Fuel Flow - gal/hr Fuel Press - PSI  Cest Lonfiguration Clight No. Cizne - Min AS - knots Mititude - ft	75.6 44.80	424 19880	350 29700		P)	6 H T HOUT	A/RS	PSE (	
Fuel Hand — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Fast  Configuration  Clight No.  Cizne — Min  AS — knots  Mititude — ft  ir Temp — C  PM  Ex. Gas Temp — C	75.6 44.80	424 19880	350 29700		P L	6AT HOUT	A/RS	esel.	
Fuel Haed — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Fast Configuration Flight No. Cirne — Min AS — knots Mititude — ft Air Temp — C. PM  Ex. Gas Temp — C.	75.6 44.80	424 19880	350 29700		P A	6AT HOUT	A/RS	eset.	
Fuel Used — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Test Configuration Clight No. Cime — Min AS — knots Mititude — ft Air Temp—°C CPM  The Gas Temp—°C CRACTE — SAC	75.6 44.80	424 19880	350 29700		P A	6AT HOUT	A/RS	eset.	
Fuel Hand — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Fast Configuration  Hight No.  Fizne — Min  AS — knots  Mititude — ft  ir Temp — C  IPM  To Gas Temp — C	75.6 44.80	424 19880	350 29700			6HT HOUT	A/RS	PEEU.	
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Fuel Hand — gal Fuel Flow — gal/hr Fuel Press — PSI  Fast  Configuration  Flight No.  Flig	75.6 44.80	424 19880	350 29700		#17 W17	HOUT	A/RS	PEEL	
Fuel Hand — gal Fuel Flow — gal/hr Fuel Press — PSI  Fast  Configuration  Flight No.  Cizne — Min  AS — knots  Attitude — ft  AX — Temp — C  TYPM  TYP	75.6 44.80	424 19880	350 29700			6AT- HOUT	A/RS	PEEL E	
Fuel Hand — gal Fuel Flow — gal/hr Fuel Press — PSI  Cast Configuration Flight No. Cime — Min AS — knots  Mittude — ft  Mr Tamn — C  T. Gas Tamn — C  T. Gas Press — *Hg  Tel Hand — gal  Tel Flow — gal/hr  Tel Press — PSI  Cast Configuration  Light No.  Lime — Min  Min	75.6 44.80	424 19880	350 29700			6AT- HOUT	A/RS	PEEL E	
Inal Hand — gal Fuel Flow — gal/hr Fuel Press — PSI  Cast Configuration Flight No. Cime — Min AS — knots  Attitude — ft Ar Temp — C  The Hand — gal Fuel Hand — gal Fuel Flow — gal/hr  Cuel Press — PSI  Cast Configuration  Light No. Cime — Min AS — knots	75.6 44.80	424 19880	350 29700			6 N T HOUT	A/RS	Psist.	
Fuel Flow — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Fast  Configuration  Flight No.  Fixe — Min  AS — knots  AS — knots  AS — tonn—°C  Trann—°C  Trannn—°C  Trann—°C  Trannn—°C  Tran	75.6 44.80	424 19880	350 29700			6AT HOUT	A/RS	Psist.	
Fuel Flow — gal/hr Fuel Flow — gal/hr Fuel Press — PSI  Fast  Configuration  Flight No.  Time — Min  AS — knots  AS — knots  AS — tonn—°C  TYPM	75.6 44.80	424 19880	350 29700			6AT HOUT	A/R35		
Fuel Hand — gal Fuel Flow — gal/hr Fuel Press — PSI  Cast Configuration Flight No. Cime — Min AS — knots Lititude — ft Lix Gas Temp—°C LIX Gas	75.6 44.80	424 19880	350 29700			6AT HOUT	A/RS PT.		
Tuel Used — gal Fuel Flow — gal/hr Fuel Press — PSI  Cast Configuration Flight No. Cime — Min AS — knots Attitude — ft Ar Termy — C PM Cast Press — PHg Cast Press — PHg Cast Press — PSI  Cast Press — PSI  Cast Press — PSI  Cast Press — PSI  Cast Cast Cast Cast Cast Cast Cast Cast	75.6 44.80	424 19880	350 29700			6AT HOUT	A/RS		
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Inel Hand — gal Fuel Flow — gal/hr Fuel Press — PSI  Cast Configuration Flight No. Cime — Min AS — knots Lititude — ft Lix Gas Temp—°C LPM Lix Gas Temp—°C Lix Gas Press — *Hg Luck Flow — gal/hr Luck Press — PSI  Cast Cast Configuration Light No. Lima — Min AS — knots Lititude — ft Lix Gas Temp—°C Lix Gas Press — *Hg Lix Gas Temp—°C Lix Gas Press — *Hg Lix Gas Pres	75.6 44.80	424 19880	350 29700			6AT HOUT			
Inel Hand — gal Fuel Flow — gal/hr Fuel Press — PSI  Cast Configuration Flight No. Cime — Min AS — knots Lititude — ft Lix Gas Temp—°C LPM Lix Gas Temp—°C Lix Gas Press — *Hg Luck Flow — gal/hr Luck Press — PSI  Cast Cast Configuration Light No. Lima — Min AS — knots Lititude — ft Lix Gas Temp—°C Lix Gas Press — *Hg Lix Gas Temp—°C Lix Gas Press — *Hg Lix Gas Pres	75.6 44.80	424 19880	350 29700			6 H T HOUT			
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Configuration Flight No IAS = knots CAS Pacer = mph Altitude = ft Air Temp = C	1.1411	PING	OF M		CLAP.	7 447	KAGE		777	772
Flight No.	7	16	1.6	16	-48	1/4	16	-18-	16	
AS = Knots	400	267	4	4/3	47,9	190		4177	176	1545
CAS Pacer mph	462.5	3075	2873	3000	4/01)	/7/	7/5	2.5	19700	175.5
Altitudo – ft	17730	34/00	37700	7,18,00	54500	39,450	14700	11/00	HIQO	11/2
Air Temp - C	420	-30	-32	790	- £5	AS	+2/		-3	-6
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onliguration	INL	ETS	POREE	NS 7	PETRA	TED	<b>,</b> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	grane de stergalence mer	·
hrust Run No.		1527			12020	-			-
RPM	3/83	3960	4775	2565	6360	743	7950	1225	13
Air Tome °C	20.4	20.6	20.9	31,2		21.6	21.8		
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COMDRAFFIC, EDWARDS AFB, CALIFORNIA

COMDR WADC, WRIGHT-PATTERSON AFB, OH'O

3 MAY 54

SUBJECT FLIGHT TEST OF PTE INSTALLATION IN F-86F.... THE AIR FORCE PHASE FOUR AND OPERATIONAL SUITABILITY TEST OF THE GENERAL ELECTRIC BAILMENT ATRCRAFT F-86F S/N 506 EQUIPPED WITH PRE-TURBINE INJECTION BEGAN 21 APRIL 54. TO DATE FOUR FLIGHTS UTILIZING NINETEEN MINUTES PTI TIME HAVE BEEN CONDUCTED. PTI WAS STARTED ON ALL FOUR FLIGHTS AT 20,000 FEET ALTITUDE DURING THE CLIMB AND SHUT OFF AT 45,000 FEET ALTITUDE EXCEPT ON THE LAST FLIGHT WHEN THE PILOT LEFT PTI ON AND LEVELED OFF AT 45,000 FEET ALTITUDE WHERE THE PTI BLEW OUT. OPERATION HAS BEEN SATISFACTORY DURING THE CLIMBS FROM 20,000 to 45,000 FEET ALTITUDE ON THESE FOUR FLIGHTS. HOWEVER DUE TO BINDING OF THE NOZZLE ACTUATOR ASSEMBLY IT HAS NOT BEEN POSSIBLE TO MAINTAIN SATISFACTORY PTI OPERATION IN LEVEL FLIGHT. IN THOSE CASES WHERE A PTR LIGHT WAS ACCOMPLISHED IN LEVEL FLIGHT THE NOZZLE STUCK IN THE CLOSED POSITION RESULTING IN A CRITICAL DROP OFF IN MAIN ENGINE SPEED DUE TO THE INCREASED PTI PRESSURES, REPLACEMENT OF THE NOZZLE AND ACTUATOR ASSEMBLY DID NOT ELIMINATE THE BINDING. INVESTIGATION REVEALED THAT OIL LEAK-AGE FROM A BEARING IN THE ACTUATOR MOTOR COULD BE CAUSING THE JACK-SHAFT TO GUM UP AND BIND, AND ALSO COULD BE CAUSING THE ACTU-ATOR MOTOR BRAKE TO EXPAND AND BIND DURING MOTOR OPERATION. AT THIS TIME THE ACTUATOR MOTOR IS BEING MODIFIED IN AN ATTEMPT TO ELIMINATE THIS PROBLEM. ANOTHER FACTOR THAT MAY HAVE CONTRI-BUTED TO THE BINDING IS THE EXCESSIVE FRICTION AT THE ACTUATING ARM SLOTS IN THE NOZZLE. AT PRESENT A NOZZLE WITH SURFACE HARD-ENED ACTUATING ARM SLOTS AND SURFACE HARDENED SEGMENTS HAS BEEN INSTALLED. IT IS EXPECTED THAT THE PROBLEM OF THE BINDING NOZZLE WILL BE ELIMINATED WITHIN THE NEXT WEEK. HOWEVER, CONSIDERABLE DELAY HAS ALREADY RESULTED FROM THIS MALFUNCTION. IN ORDER TO SATISFACTORILY ACCOMPLISH THE PHASE FOUR FLIGHT TEST AND OPERA-TIONAL SUITABILITY TEST IT WILL BE NECESSARY TO EXTEND THE PROGRAM DURATION FROM TWO WEEKS TO SIX WEEKS. IT IS REQUESTED THAT THIS EX-TENSION BE AUTHORIZED.

DONALD H. WOOLEY, 1/Lt, USAF

FTDTP

Project Engineer

H. A. HANES, Colonel, USAF Director, Flight Test and Development

APPENDIX IV

COMOR AFFTC, EDWARDS AFB CALIFORNIA

COMDR WADC, WRIGHT-PATTERSON AFB OHIO

17 May 54

SUBJECT FLIGHT TEST OF PTI INSTALLATION IN F-86F.... TEST FLIGHTS OF THE AIR FORCE PHASE FOUR AND OPERATIONAL SUITA-BILITY TEST OF THE GENERAL ELECTRIC BAILMENT AIRCRAFT F-86F S/N 506 EQUIPPED WITH PRE-TURBINE INJECTION WERE COMPLETED 6 MAY 54. EIGHTEEN FLIGHTS HAVE BEEN MADE TOTALING THIRTEEN HOURS AND THIRTY MINUTES INCLUDING TWO HOURS PTRTIME. DURING THE FIRST FOUR FLIGHTS PTI OPERATION WAS NOT ENTIRELY SATISFACTORY BECAUSE OF BINDING OF THE NOZZLE AND/OR NOZZLE ACTUATOR ASSEMBLY. THIS CON-DITION WAS ELIMINATED BY SUITABLE MODIFICATIONS AND THE FIFTH THROUGH THE TENTH FLIGHTS WERE MADE WITH PTI OPERATING SATIS-FACTORILY. ON THE ELEVENTH FLIGHT A TURBINE BUCKET FAILED. TIME ON THE BUCKETS WHEN FAILURE OCCURRED WAS TWO HOURS AND EIGHT MINUTES OF PTI TIME. THE TURBINE WHEEL WAS REPLACED AND PTI OP-ERATION WAS SATISFACTORY UNTIL FLIGHT EIGHTEEN WHEN ANOTHER TUR-BINE BUCKET FAILED. TIME ON THIS SET OF BUCKETS WAS ONE HOUR AND FORTY-THREE MINUTES. INFORMAL INFORMATION FROM THE GENERAL ELECTRIC COMPANY INDICATES THAT THE LONGEST TIME TO BE ACCUMU-LATED ON A SET OF TURBINE BUCKETS WAS TWO HOURS AND TWELVE MIN-UTES AT WHICH TIME A 1200°C START NECESSITATED THE REMOVEL OF THE TURBINE WHEEL. IT IS RECOGNIZED THAT THE PTI INSTALLATION HAS CON-SIDERABLE MERIT BUT DUE TO THE RELATIVELY SHORT DURATION OF THE TEST IT IS DIFFICULT TO FULLY EVALUATE THIS SYSTEM. IT IS ANTICIPATED THAT ADDITIONAL TESTING WILL ELIMINATE THE DIFFICULTIES ENCOUNTERED. THE AFFTC RECOMMENDS THAT FURTHER DEVELOPMENTAL TESTING ON THE PTI INSTALLATION BE ACCOMPLISHED BOTH BY GENERAL ELECTRIC AND BY THE AIR FORCE. TO EXPEDITE THE PTI PROGRAM IT IS SUGGESTED THAT THE IN-SERVICE FUNCTIONAL DEVELOPMENT TEST BE RUN CONCURRENTLY WITH THE ABOVE TESTS. IT IS ALSO RECOMMENDED THAT THE IN-SERVICE TEST BE CONDUCTED UNDER STRICT TEST CONDITIONS WITH SUITABLE LIMI-TATIONS ON PTI OPERATION. THE FOLLOWING APPROXIMATED PERFORMANCE

DATA WERE OBTAINED FROM THE INSTRUCENT CORRECTED, RAW DATA WITH A GROSS TAKE-OFF WEIGHT OF 15,400 POUNDS. RATE OF CLIMB AT 20,000 FEET WAS INCREASED 6,500 FEET PER MINUTE WITH PTI AS COMPARED TO DRY OPERATION. THIS DELTA RATE OF CLIMB IS INDICATIVE OF THE INCREASE IN CLIMB PERFORMANCE THROUGHOUT THE 20,000 TO 45,000 FOOT ALTITUDE RANGE TO WHICH THIS PTI ENGINE CONFIGURATION IS LIMITED. AN AVERAGE TIME TO CLIMB FROM 20,000 TO 45,000 FEET WAS FOUR MINUTES WITH PTI. AT 40,000 FEET TIME TO ACCELERATE FROM MINIMUM TO MAXIMUM AIRSPEED WAS DECREASED FROM FOUR MINUTES TWENTY-TWO SECONDS TO ONE MINUTE FOR TY SECONDS WITH PTI. AT 30,000 FEET AN .025 INCREASE IN MAXIMUM LEVEL FLIGHT MACH NUMBER WAS OBTAINED OVER DRY OPERATION. THE TEST PILOT REPORTS THAT ALTHOUGH PTI OPERATION DURING THE FIRST FOUR FLIGHTS WAS UNSATISFACTORY. PTI OPERATION DURING THE SUBSEQUENT FOURTEEN FLIGHTS WAS SIMPLE AND DEPENDABLE.

DONALD H. WOOLEY, 1/Lt, USAF

H. A. HANES, Colonel, USAF

FTDTP
Project Engineer

THE STATE OF

Director, Flight Test and Development

APPENDIX IV

# PRELEMINARY EVALUATION OF THE GENERAL ELECTRIC PRE-TURBINE INJECTION SYSTEM

#### A. PUR POSE

1. This report presents the results of a preliminary evaluation to determine the practicability and suitability of the General Electric Company's pre-turbine injection installation in an F-86F irroraft.

### B. INTRODUCTION

- 1. The pre-turbine injection installation (hereafter referred to as PTI) was developed by the General Electric Company as a thrust augmentation system for the F-86F aircraft. The system is designed to give approximately 40 /o increased thrust and is restricted to altitudes between 20,000 and 45,000 feet.
- 2. Flight testing of the PTI system was authorized by WADC, and on 21 April 1954 a test program was initiated on the General Electric Company's bailment F-86F S/N 506. During the testing period of 21 April to 6 May 1954, eighteen test flights were made, accumulating 13:30 hours of flight time, approximately 2:00 hours of which was PTI time.

## C. TEST RESULTS AND DISCUSSION

- 1. The following is a resume of the main difficulties encountered during the program:
- a. During the first four flights PTI operation was unsatisfactory. On each of these flights PTI was started at 20,000 feet and did operate satisfactorily to 45,000 feet, however, ittempts to relight PTI after the climb were unsuccessful. On those attempts where a light was made, a critical drop in engine speed resulted. It was determined that this drop in speed was caused by failure of the jet nozzle to open to the proper position. Investigation revealed several factors which may have prevented the jet nozzle from opening properly. After suitable modifications were made the operation of the PTI system was satisfactory. A list of the factors contributing to the binding of the nozzle and the modifications made, is as follows:
- (1) Friction of the nozzle actuating arms at the nozzle actuating arm slots; friction was reduced by installing a nozzle body with surface hardened arm slots.
- (2) Fration between the nozzle segments and the nozzle body; surface hardened nozzle segments were installed.
- (3) Serving of the nozzle jack shaft in the needle bearings at high temperatures; diameter of the jack shaft was decreased.

- (4) Burling of the waste actuator motor brake due to absorption of oil to age? clearance of brake increased.
- (5) Gumming of the nozzie jack shaft due to oil leakages all sources of oil leakage to the assembly were climinated.
- b. On flight No. 10 PTI was started at 45,000 feet in a climb. The climb continued to 50,000 feet with PTI operating satisfactorily. AT 50,000 feet PTI was sbut off and relighted satisfactorily using a "speed-jog" technique. To light PTI by the "speed-jog" method; a throttle setting of slightly less than full forward is established, immediately upon starting PTI the throttle is advanced to the full forward position. The climb was continued to 53,420 feet. At this altitude a loud noise and subsequent vibration caused the pilot to retard the throttle to idle. The aircraft was landed with the engine at idle speed. An inspection revealed that a single turbine backet had failed.
- c. On flight No. 11 difficulty was experienced in lighting and maintaining PTI. This was attributed to a low main engine fuel flow setting for PTI operation. The main engine fuel flow was increased and PTI operation was satisfactory in subsequent flights.
- d. On flight No. 18 at 44,000 feet after being on PTI for approximately 13 minutes a loud noise and an aft fire warning light caused the pilot to cut off the engine and make a dead-stick landing. The amount of continuous PTI time accumulated during this flight was longer than on any previous flight. Inspection of the engine revealed another single turbine bucket failure. This was the last flight made under the Air Force test program.
- 2. a. A zyglo inspection of the two turbine wheels which suffered the bucket failures did not reveal any defects in the turbine wheel blanks. The maximum tip diameters were 34.334 and 34.322 inches, respectively. The first of these diameters exceeds the maximum allowable diameter of 34.325 for turbine wheels in standard use, however, for the PTI test the General Electric Company has tentatively increased the maximum print dimension to 34.385. The maximum blank diameters of the two turbine wheels were 26.736 and 26.744 inches respectively. The standard maximum blank diameter is 26.738 inches, on this basis the second turbine wheel was rejected. The buckets from the two turbine wheels have been sent by the General Electric Company to the Thompson Laboratory of the General Electric Company for analysis; the results are not yet available.
- b. The PTI operation time accumulated by each set of buckets at the time of failure was 2 hours and 8 minutes and 1 hour and 43 minutes respectively. Informal information from the General Electric Company indicates that 2 hours and 12 minutes is the longest PTI time to ever be accumulated on one set of turbine wheel buckets.
- 3. The procedures for initial adjustment of the PTI system have not yet beenfinalized. At this time the PTI fuel flow is first adjusted on the ground to some predetermined value. The main fuel flow is then adjusted to be compatible with the PTI fuel flow, that is, to maintain a suitable pressure ratio between compressor discharge pressure and turbine discharge pressure so that PTI will start and operate satisfactorily. It is necessary to make very short duration PTI ground

runs and usually to make one or two test thights before the system is set up properly. This procedure is under study by the General Electric Company and it is likely that it will be modified.

- 4. During those flights when the PTI system was operating satisfactorily no difficulties were encountered in the operation of the system. Satisfactory PTI operation was demonstrated during all normally encountered aircraft maneuvers. The PTI system was started in climbs and dives and at both low and high airspeeds. Successful PTI lights are usually made on the first try using a normal starting procedure; while at 100% power momentarily pushing the throttle outboard to actuate a micro switch which starts the PTI. Use of the previously described speed-jog technique will almost always result in a satisfactory start should the normal starting procedure fail, providing the system is operating satisfactorily.
- 5. The General Electric Company has estimated that about 400 manhours would be required to modify an aircraft which is in service, to the PTI configuration. After installation of the final configuration of the PTI system the maintenance of the system proper is not experted to be excessive. Engine maintenance, however, due to the frequent inspections necessary and the short service life of the turbine wheel and buckets, will require a considerable number of manhours.
- 6. At this time the main disadvantages of the system are the short service life of turbine wheels and the maximum altitude limitation. The advantages are the increased performance of the aircraft, the simplicity of the system, and the easy adaptation of the system to great numbers of aircraft already in service.

## D. CONCLUSIONS

- l. At this time the General Electric Company's present PTI system has not been flight tested sufficiently for normal use by operational organizations. The system as tested could be utilized in F-86F aircraft with the following limitations:
  - a. Altitude: 20,000 to 45,000 feet.
  - b. Maximum continuous operation of PTI: 10 minutes.
  - c. Maximum PTI operation per flight: 10 minutes. (In order that frequent inspections can be made during the preliminary testing).
  - d. Maximum service life of turbine wheel buckets: 2 hours of PTI time.
  - e. Time between zyglo inspection of turbine wheels and hot section inspection of engines; I hour of PTI time.
  - f. Maximum turbine wheel tip and blank diameters; to be as specified in applicable Technical Orders.

- 2. Before being placed in operational organizations the PTI system should undergo a functional development test and further evaluation by an Air Force Flight Test organization. This test should be authorized as soon as possible in order that a fully developed PTI system be available in case of national emergency.
- 3. The PTI system possesses considerable potential and should be further developed by the General Electric Company.

## E. RECOMMENDATIONS

- 1. The following actions are recommended in order to complete the development of the PTI system:
- a. Continuation of the General Electric Company's flight test program at Edwards Air Force Base in order to improve the present PTI system, with emphasis on increasing the maximum altitude and increasing the service life of the turbine buckets.
- b. Authorization of a functional development test and evaluation of the present PTI system by the Air Force. This test would be primarily an evaluation of the capabilities and limitations of the present PTI system and would provide information to be used in the development of an improved system. The following problems should be given particular consideration:
- (1) Service life of the turbine wheel and hot section parts under PTI operation.
- (2) Effect of continuous long duration PTI operation at various altitudes.
  - (3) Allowable altitudes for PTI operation.
- (4) Effect of PTI operation on the structure of the tail cone, tailpipe and aircraft fuselage.
- (5) Determination of turbine bucket temperatures through the use of an instrumented nozzle diaphragm.
- (6) Determination of maximum allowable turbine wheel tip diameter and turbine wheel blank diameter for PTI operation.
- (7) Investigation of the adaptation of the free floating shroud ring assembly to the PTI installation to reduce the possibility of shroud seizure.
- 2. Because of the potential of the PTI system and the advantages of this system it is recommended that further development and flight testing be authorized as soon as possible.

WILLIAM D. MOTZNY, 1/Lt, USAF Project Engineer

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OFFICE SECURITY ADVISOR



# DEPARTMENT OF THE AIR FORCE HEADQUARTERS AIR FORCE MATERIEL COMMAND WRIGHT-PATTERSON AIR FORCE BASE OHIO

FEB 1 9 2002

## MEMORANDUM FOR DTIC/OCQ (ZENA ROGERS) 8725 JOHN J. KINGMAN ROAD, SUITE 0944 FORT BELVOIR VA 22060-6218

FROM: AFMC CSO/SCOC

4225 Logistics Avenue, Room S132 Wright-Patterson AFB OH 45433-5714

SUBJECT: Technical Reports Cleared for Public Release

References: (a) HQ AFMC/PAX Memo, 26 Nov 01, Security and Policy Review, AFMC 01-242 (Atch 1)

(b) HQ AFMC/PAX Memo, 19 Dec 01, Security and Policy Review, AFMC 01-275 (Atch 2)

- (c) HQ AFMC/PAX Memo, 17 Jan 02, Security and Policy Review, AFMC 02-005 (Atch 3)
- 1. Technical reports submitted in the attached references listed above are cleared for public release in accordance with AFI 35-101, 26 Jul 01, *Public Affairs Policies and Procedures*, Chapter 15 (Cases AFMC 01-242, AFMC 01-275, & AFMC 02-005).
- 2. Please direct further questions to Lezora U. Nobles, AFMC CSO/SCOC, DSN 787-8583.

LEZORA U. NOBLES AFMC STINFO Assistant

Directorate of Communications and Information

## Attachments:

- 1. HQ AFMC/PAX Memo, 26 Nov 01
- 2. HQ AFMC/PAX Memo, 19 Dec 01
- 3. HQ AFMC/PAX Memo, 17 Jan 02

cc:

HQ AFMC/HO (Dr. William Elliott)



## DEPARTMENT OF THE AIR FORCE

HEADQUARTERS AIR FORCE MATERIEL COMMAND WRIGHT-PATTERSON AIR FORCE BASE OHIO

DEC 19 2001

## MEMORANDUM FOR HQ AFMC/HO

FROM:

HQ AFMC/PAX

SUBJECT:

Security and Policy Review, AFMC 01-275

1. The reports listed in your attached letter were submitted for security and policy review IAW AFI 35-101, Chapter 15. They have been cleared for public release.

2. If you have any questions, please call me at 77828. Thanks.

JAMES A. MORROW

Security and Policy Review
Office of Public Affairs

Attachment:

Your Ltr 18 November 2001

# MEMORANDUM FOR: HQ AFMC/PAX Attn: Jim Morrow

FROM: HQ AFMC/HO

SUBJECT: Releasability Reviews

- 1. Please conduct public releasability reviews for the following attached Defense ... Technical Information Center (DTIC) reports:
  - a. Emergency Fuel Selector Valve Test on the J47-GE-27 Engine as Installed on F-86F Aircraft, January 1955; DTIC No. AD-056 013.
  - b. Phase II Performance and Serviceability Tests of the F-86F Airplane USAF No. 51-13506 with Pre-Turbine Modifications, June 1954; DTIC No. AD-037 710.
  - c. J-47 Jet Engine Compressor Failures, 7 April 1952; DTIC No. AD- 039 818.
  - d. Evaluation of Aircraft Armament Installation (F-86F with 206 RK Guns) Project Gun-Val, February 1955; DTIC No. AD-056 763.
  - e. A Study of Serviced-Imposed Maneuvers of Four Jet Fighter Airplanes in Relation to Their Handling Qualities and Calculated Dynamic Characteristics, 15 August 1955; DTIC No. AD- 068 899.
  - f. Fuel Booster Pump, 6 February 1953; DTIC No. AD- 007 226.
  - g. Flight Investigation of Stability Fix for F-86F Aircraft, 8 September 1953; DTIC No. AD- 032 259.
  - h. Investigation of Engine Operational Deficiencies in the F-86F Airplane, June 1953; DTIC No. AD- 015 749.
  - i. Operational Suitability Test of the T-160 20mm Gun Installation in F-86F-2 Aircraft, 29 April 1954; DTIC No. AD- 031 528.
  - j. Engineering Evaluation of Type T 160 Gun and Installation in F 86 Aircraft, September 1953; DTIC No. AD- 019 809.

- k. Airplane and Engine Responses to Abrupt Throttle Steps as Determined from Flight Tests of Eight Jet-Propelled Airplanes, September 1959; DTIC No. AD-225 780.
- 1. Improved F-86F: Combat Developed, 28 January 1953; DTIC No. AD- 003 153.
- m. Flight Test Progress Report No. 19 for Week Ending February 27, 1953 for Model F-86F Airplane NAA Model No. NA-191, 5 March 1953; DTIC No. AD-006 806.
- 2. These attachments have been requested by Dr. Kenneth P. Werrell, a private researcher.
- 3. The AFMC/HO point of contact for these reviews is Dr. William Elliott, who may be reached at extension 77476.

JOHN D. WEBER
Command Historian

## 13 Attachments:

- a. DTIC No. AD- 056 013
- b. DTIC No. AD- 037 710
- c. DTIC No. AD- 039 818
- d. DTIC No. AD- 056 763
- e. DTIC No. AD- 068 899
- f. DTIC No. AD- 007 226
- g. DTIC No. AD- 032 259
- h. DTIC No. AD- 015 749
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